RICHMINT DAO

WEB 3.0 based Blockchain platform for ESG businesses

WHITEPAPER

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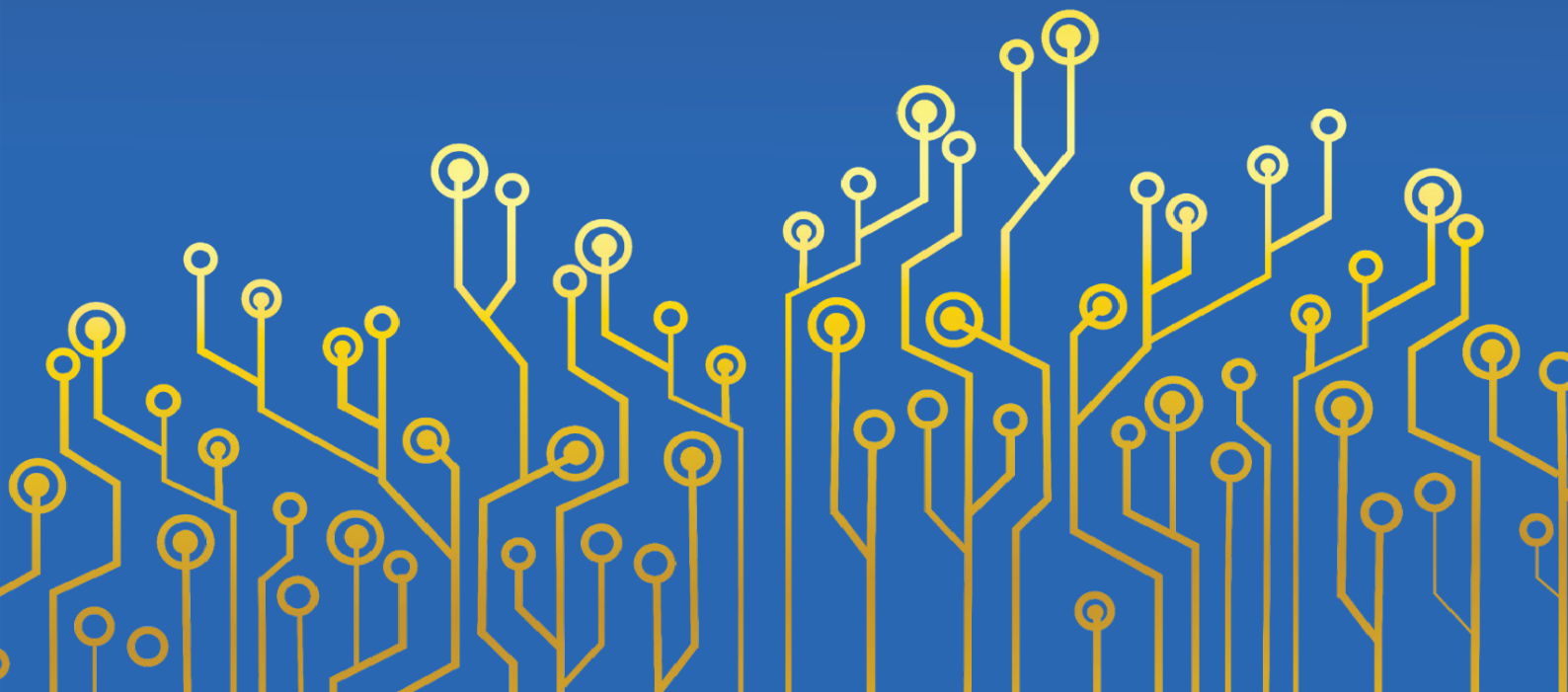

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The Richmint Sustainable Project

RICHMINT ecosystem envisions to provide a global range of audience with the necessary tools to decentralize the financing of sustainable infrastructure, tokenize emissions certifications to help assist ESG reporting become more consistent, standardized, effective and also make better use of existing infrastructure assets.

RICHMINT tokenizes global energy trade to make RE trades seamless, safe & easily accessible for all. With a suite of web 3.0 based DApps, now all stakeholders can track and trade energy, exchange environmental commodities over a fully robust next gen decentralized technology layer built to facilitate a growing global energy ecosystem. While Connecting Energy Producers, Buyers,

Market Intermediaries, and Lenders, RICHMINT equips them with standardized tools, processes, and smart contracts to facilitate transactions even in no-trust ecosystems. Energy Buyers are able to reduce their electricity costs to below-market rates at any given time with full transparency and ease. Project Owners are therefore able to contract the electricity output of their projects to a wider range of buyers, making it easier for their projects to secure financing.

RICHMINT Decentralized Autonomous Organisation (RICHMINT DAO) oversees the development, deployment and growth of this web 3.0 based Renewable Energy Ecosystem incentivizing all market participants to transition to renewables, to transact at speeds and tap into efficiencies the current standard processes cannot offer yet. Key milestones are stated below:

1. **Decentralize** the Financing of Sustainable RE infrastructure.

2. **Tokenize** Emission Certification for Pollution control.

3. Standardize the Reporting & Efficient usage of Infrastructure for **ESG Governance**.

4. Decentralized Governance through **DAO** implementation.

5. Web **3.0 DAPPS** Ecosystem for seamless Track, Trade and Exchange of Environmental commodities.

6. Efficient **Smart Contracts** for Buyers and Customers thus reducing transaction cost.

After thorough and meticulous research, the RICHMINT team onboarded experts from various fields, brainstormed, peer-reviewed flows & processes to bring forth a power system that can adapt to the needs of various markets with different approaches to energy procurement.

After tokenizing RE energy, facilitating efficient exchange of RE globally, RICHMINT will deploy an ESG themed Blockchain which will act as a base for the future of sustainable development initiatives. RICHMINT believes, by enabling access to affordable and clean energy through a secure, resilient, low-cost system owned by the people of the world, growing industries, economies & developing nations, we can join forces with big players to make the necessary impact. Offering tools for investors to invest in projects that comply with ESG standards, verified on Blockchain, we can efficiently cut down on the feedback loop of releasing more greenhouse gases while trying to save the planet.

1. Executive Summary

For more than a decade now, the world has been focusing on getting greener. The 1997 Kyoto Protocol on reducing Greenhouse gases and the 2015 Paris Agreement on Climate change were firm commitments made across the globe to try and curb the global-warming crisis. In order to tackle the detrimental crisis, head on; companies, investors and fund houses have been using ESG criteria to screen potential opportunities and make value investments. Growing decentralized ecosystems, networks & organizations powered by blockchain & cryptocurrencies show us promising ways to build decentralized applications that can ease global energy trade and help economies transition from fossils to Renewables in order to become sustainable for the people, planet while being profitable and fair.

The RICHMINT platform aims to bring together numerous Renewable energy buyers and sellers directly, while offering both parties the contracts and all the required standardized tools to undertake transactions seamlessly by tokenizing RE. Along with the RE buyers and sellers, the RICHMINT FINANCE (Ri-Fi) is well designed to flawlessly bridge the investor community, and fund houses to the blockchain marketplace by providing complete data transparency, simplified access, reliability and security, even in trustless environments. Along with the RICHMINT DAO and its smart contracts, we plan to bring in the robust protocol layers and DApps in the ecosystem as a firm way to enact the proper governance and also as a way for stake holders to invest, manage and trade PPA's.

With an added option of Fractional contracting in the blockchain, RICHMINT targets to include even small and medium size RE Generators and Buyers into this cycle.

With the ease of use and the availability of RICHMINT DAO based smart contracts, to all stake holders, RICHMINT aims for extreme optimization of energy procurement and distribution globally.

RICHMINT's Decentralized RE PPA trading platform and RICHMINT global marketplace is planned to be launched across the world in order to enhance the Renewable energy adoption rate across all sectors. With the increasing affordability of Renewables, complemented with their competitive price points, RICHMINT aims to aid the world to collectively transition into a Sustainable tomorrow.

ISSUER	RICHMINT DIGITECH SERVICES OÜ		
Token Symbol	RMW (ERC-20 based Utility token)		
Soft Cap	$5 Million USD		
Hard Cap	$50 Million USD		
Total Supply	10 Billion Tokens		
Period of Sale From - To	**Stage of Sale**	**No. of RMW (in Mil)**	**Price per RMW**
18 Jan–04 Feb 22	Pre Seed	100	$0.01 USDT
07 Feb–19 Feb 22	Seed	200	$0.02 USDT
21 Feb –12 Mar 22	Private R1	250	$0.05 USDT
15 Mar– 28 Mar 22	Private R2	300	$0.08 USDT
Accepted Currencies	USD, GBP, EURO BTC, ETH, BNB, LTC, TRX,USDT		
Eligibility	Subject to KYC & AML		

All Unsold tokens after ICO Sale will be Burnt.

Project Implementation

Humanities Fight against Climate Change:

From the time climate change & the greenhouse effect were first discovered in the early 19th century, we came a long way by being able to spot the causes, drivers, measure & even predict the scale of its impact.

Improvements in the fidelity of computer models and observational work confirming the Milankovitch theory of the ice age resulted in a consensus in the 1990s.

“Greenhouse gases were deeply involved in most climate change and human-caused emissions were clearly bringing global warming”

The Kyoto Protocol, another landmark agreement promising to cut back on global greenhouse gas emissions, was adopted at COP in 1997. Over the past decade, the world has taken this seriously and the 2015 Paris Agreement on Climate Change, which aimed to limit global warming to 1.5 C, is a milestone in such progress. Tens of thousands of delegates from over 200 countries are set to attend COP 26 in 2021. Hosting the event, the U.K acts as a joint organizer of COP26 with Italy, as together the world aims to get governments to net-zero by 2050.

Environment, Social, Governance(ESG):

Socially conscious investors are using Environmental, Social, and Governance (ESG) criteria, a set of standards for a company’s operations, to screen potential investments. Environmental standards to measure how a company performs as a steward of nature. Social criteria examine how it manages relationships with employees, suppliers, customers, and the communities where it operates.

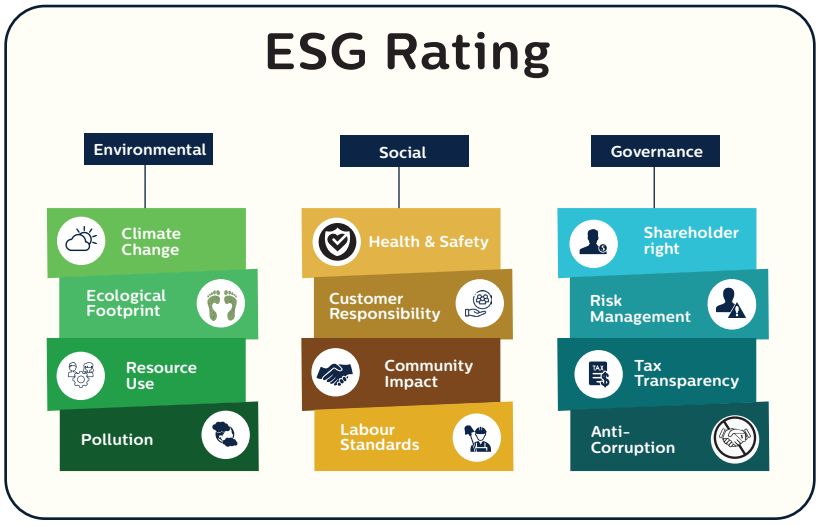


Fig.1 Ref 27

Governance criteria provides a gist of a company's leadership, executive pay, audits, internal controls, and share holder rights. With the help of frameworks such as ESG, the young generation of investors are now putting their money where their values are, playing a huge role in the fight against climate change.

Renewable Energy:

A safe, sustainable & affordable alternative Renewables became affordable, breaching competitive price points of non-renewable energy giving the world a chance now to get an edge in this race to revert the damage made through the transition of major governments and growing Industries to RE. All this is significant progress but there are still some major obstacles across the market that are to be bypassed in order to reach the targets being set at the moment.

Roadblocks:

To date, Renewable energy(RE) transactions are still expensive complex procedures with a very little market under standardized lifecycles, while the rest involve lots of fraudulent actors. Lack of liquidity, lack of safe and transparent financial services, sheer dependencies on middlemen, lack of interoperability b/w current players, and lack of safety for user data lay huge setbacks for adoption. In times of changing non-transparent govt policies and all these hindrances, markets are still currently facilitating mostly large volumes, leaving many small players out of the game. Lack of well defined ESG standards and inability to track companies performances across these criteria stating their environmental, social and governance systems, is a major roadblock for implementation of ESG.

2. Market Overview

2.1 Growing Global Energy Demand:

Global population is expected to grow an additional 1.3 billion; from 7.7 billion in 2019 to over 9 billion in 2040. An Increased energy demand is coming from emerging markets and developing economies. World energy demand is forecast to increase about 19% and the world would need twice as much energy as it produces today if it weren't for continuous improvements in energy efficiency. Global energy demand is expected to rebound to its pre-crisis level in early 2023.

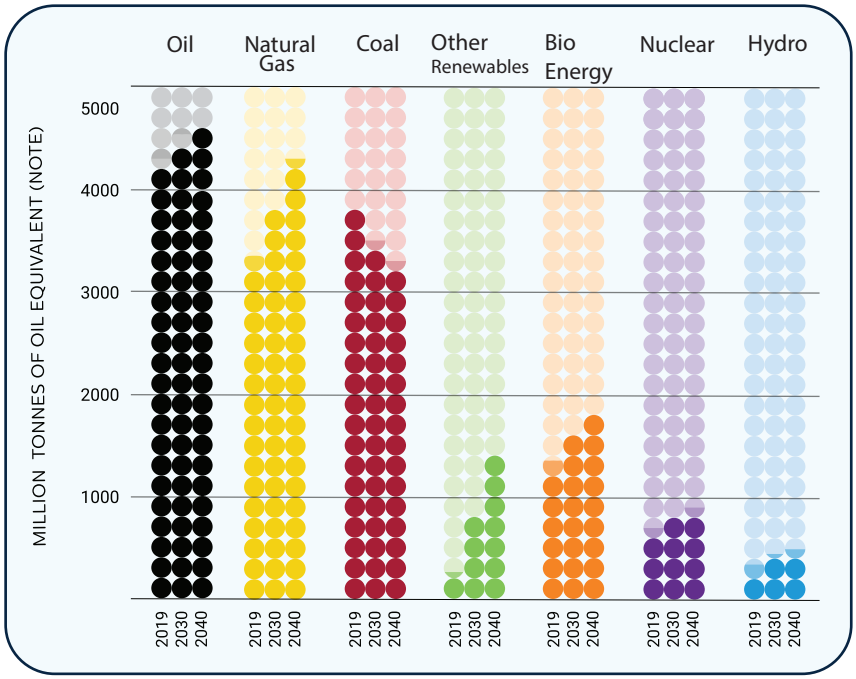


Fig.2 Ref.25

Renewable Energy:

The global renewable energy market was valued at $881.7 Billion in 2020, and is projected to reach $1,977.6 billion by 2030, growing at a CAGR of 8.4% from 2021 to 2030. As can be observed from IEA 2020 World Energy Outlook, while coal based energy output is expected to drop overall, energy from Renewables is set to grow multifold, even on a smaller base. This is very heartening as it would help in control of pollution and global warming.

China alone is likely to account for almost half the global increase in renewable electricity generation. It is followed by the United States, the European Union and India. China is expected to generate over 900 TWh from solar PV and wind in 2021, the European Union around 580 TWh, and the United States 550 TWh. Together, they represent almost three-quarters of global solar PV and wind output.

The United States gets 81% of its total energy from oil, coal, natural gas, nuclear, and other non-renewable power plants, all of which are fossil fuels. We can notice that most parts of our world still depend on fossil fuels to provide us with electricity.

How is Renewable Energy Power purchased today?

Dropping renewable energy prices made it a commercially competitive alternative to traditional energy sources. However, complicated energy procurement processes prevent most companies from buying locally produced, sustainable energy. Only major power purchasers with energy spends in the millions afford to buy green energy directly from producers.

Power Purchase Agreements (PPAs):

In today's world, Renewable Power from solar and wind farms is purchased by only large consumers through a complex set of legally binding Power Purchase Agreements (PPAs), which enforce most of the legal, operational, and commercial terms of sale and purchase of electricity.

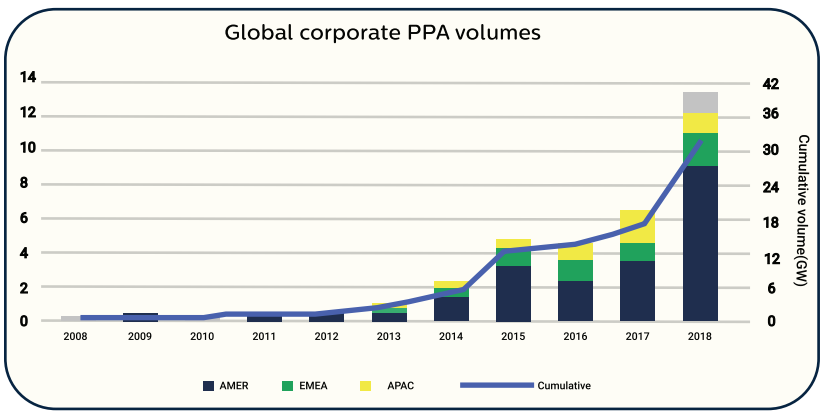


Fig.3 Ref.19

These purchases of Renewable Power help the consumers to reduce the percentage of grid electricity in their overall consumption pattern, thereby giving them significant savings in their energy bill

Key Limitations of PPA Model and Renewable Energy trade:

Complex and Non Standard Processes: The graph here shows that the number of PPAs (both quantity & Volume of energy purchase) have increased over the last 5 years. However, these PPA agreements are very complex and legally non-standard most of the time, leaving both the RE generator and the RE buyer vulnerable to exit clauses and unfair penalty regimes.

Only Large Volumes: Due to the tough and complex processes only large volumes are traded currently, leaving a huge market cap of small volumes untapped.

Dependency on single counterparty: PPAs are negotiated one-to-one between RE Generators and RE Buyers and terms of sale are based on supply/demand situations at that time. Due to this, both RE Buyer and RE Generator are not able to maximize their profits from these PPAs and are not able to fully protect their interests in case of any default from either side.

Costly Procedure: Again due to lack of availability of standard processes, faulty players the cost of services and products is often inflated with inefficiencies across the supply chains.

Lack of liquidity: In order to re-sell or decrease the quantity of purchased energy, one must renegotiate the whole agreement which adds even more time and fees.

Many companies still can’t use the benefits of cheaper green energy. Renewable Energy plants set up are not able to maximise their returns, while most of the medium and small power consumers,

who are in need of Renewable Energy for their consumption are not in a position to enter the Renewable Energy space and buy Renewable Energy Power, as they do not have access to large RE generators. Below are a few more issues which slow down RE adoption globally.

- Lack of platforms/networks connecting all stake holders
- Fraudulent actors
- Lack of access to financial services
- Protection of consumer data
- Changing Govt policies
- Lack of transparency

All the above problems also lead to the under-utilization of the full potential of Renewable Energy production and consumption in most countries.

Fossil Fuels & Climate Change:

Fossil fuels are made from the decomposition of plants and animals. These fuels are found in the Earth's crust and contain carbon and hydrogen, which can be burned for energy. Fossil fuels include coal, petroleum, natural gas, oil shales, bitumens, tar sands, and heavy oils. Since the supply of fossil fuels is limited, they are said to be non-renewable. Hence the name Non-Renewable Energy(NRE).

Once a non-renewable resource is used up, it is gone for good.

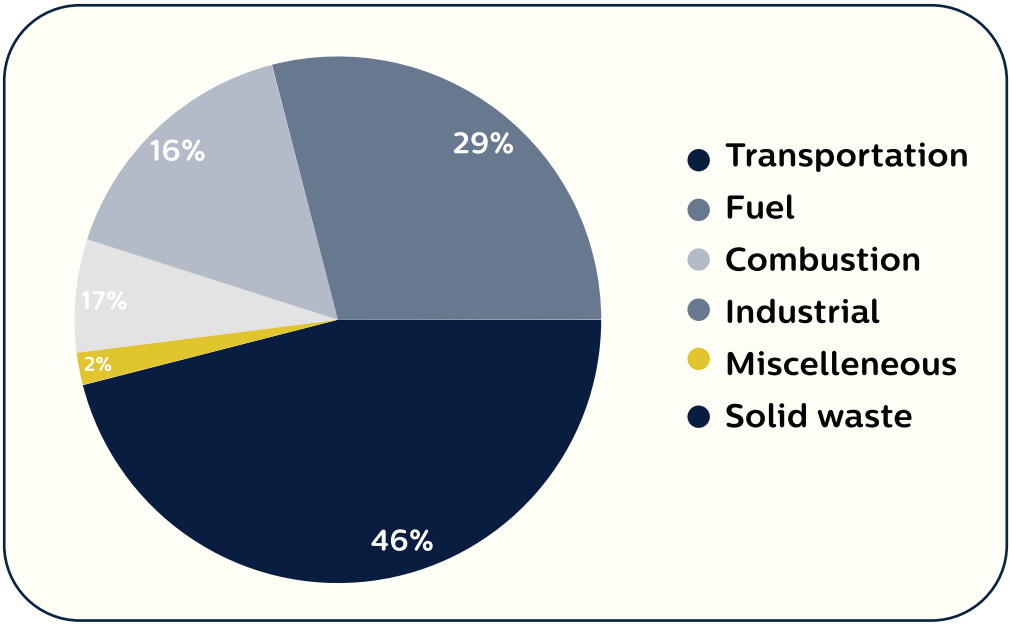
A key factor that affects its price is its distribution. Most natural resources, including fossil fuels, are not evenly distributed around the Earth. For example, while coal deposits are found in every country, the largest deposits are found in the United States, China, Russia, Australia, and India. Similarly, oil and natural gas are also found around the world, but most of the oil and natural gas reserves are in Saudi Arabia, Russia, the United States, and Iran.

Problems:

The use of fossil fuels is causing problems to our planet, environment, and human health. When fossil fuels are used or burned to generate energy, electricity, and heat, they release huge amounts of greenhouse gases. These greenhouse gases trap heat in our atmosphere, leading to global warming. The average temperature of our planet has increased by 1 degree. The Paris Climate agreement 2015 stated the limit to be 1.5 degree.

Additionally, fuel combustion in any way also causes various types of health problems to humans.

A rise in the numbers of vector-borne infectious diseases or diarrhoeal diseases has also been observed.



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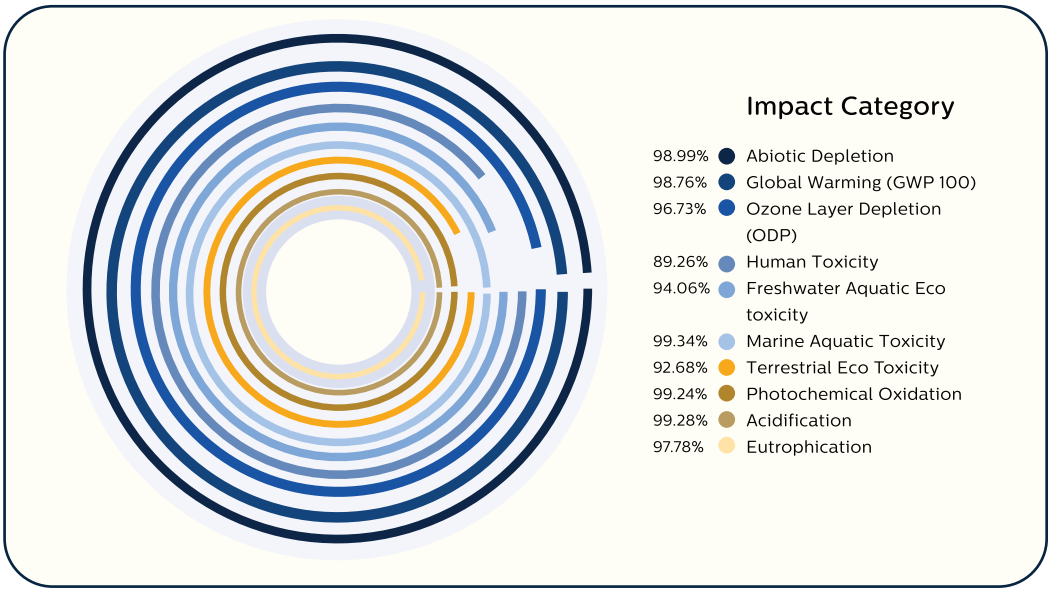
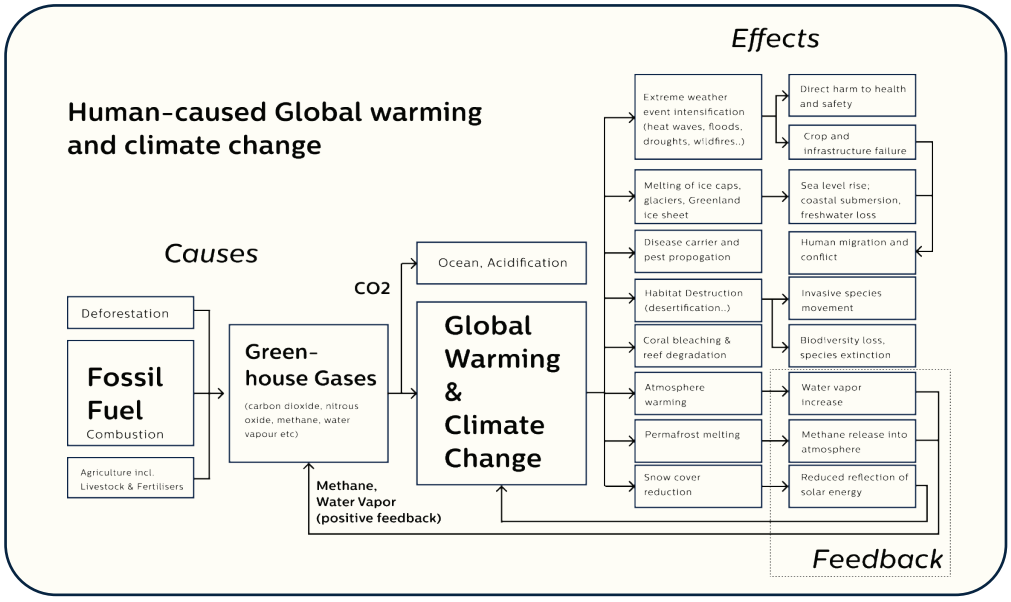


Ref.5

Global Warming:

The chart(fig.6) below presents a broad picture of the Causes of Global warming and the devastating effects it has on our planet. Due to rapid industrialization which has happened in the last 150 years, our human race has created a catastrophic situation that threatens the very survival of our race along with all species on the planet.



Ref.6

It was estimated that due to human activities between 1850 and 1900 (pre-industrial period), the earth's global average temperature increased by about 1 °C (1.8 °F). The horrific fact is that the same number is currently increasing by 0.2 °C (0.36 °F) per decade. Much of the current warming trend is the result of human activity since the 1950s and has been progressing at an unprecedented rate over decades to millennia.

Pollution and human health:

Burning fossil fuels introduce many air pollutants (gases and particles) that are very harmful to the environment and our health. Some of the major air pollutants and their effects on human health are listed below.

It has been reported that global warming has a direct impact on various aspects of human health, including infectious diseases. It also includes heat-related illnesses caused by heat waves, injuries, and deaths due to extreme geological events. The use of Fossil fuels, especially for electricity generation, is the leading cause of industrial air pollution across the globe. The production of energy from these resources has a serious impact on our environment, thereby polluting our air, land, and water.

Non Renewable Energy Consumption by Growing Technologies:

In the US alone, electricity generated from fossil fuels accounts for 27% of all greenhouse gas emissions. These greenhouse gases include carbon dioxide and also methane, nitrous oxide, and fluorinated like harmful gases. In this way of electricity generation, some other pollutants, such as oxides of ulfur and nitrogen, also get introduced. These are responsible for the cause of acid rain. Even after all the harm and damage caused to the environment and humans by the burning of fossil fuels, there are some modern-day industries being built using fossil fuels, and this is a worrisome fact. Since both fields or technologies are trying to revolutionize our world on a massive level.

Electric Vehicle (EV) Charging:

Globally, we are also witnessing the emergence and growth of the Battery-Powered Electric Vehicle (BEV) industry to address and prevent air and noise pollution. Almost all global automotive manufacturers and governments have announced plans and incentives to increase sales of electric vehicles across all mobility segments.

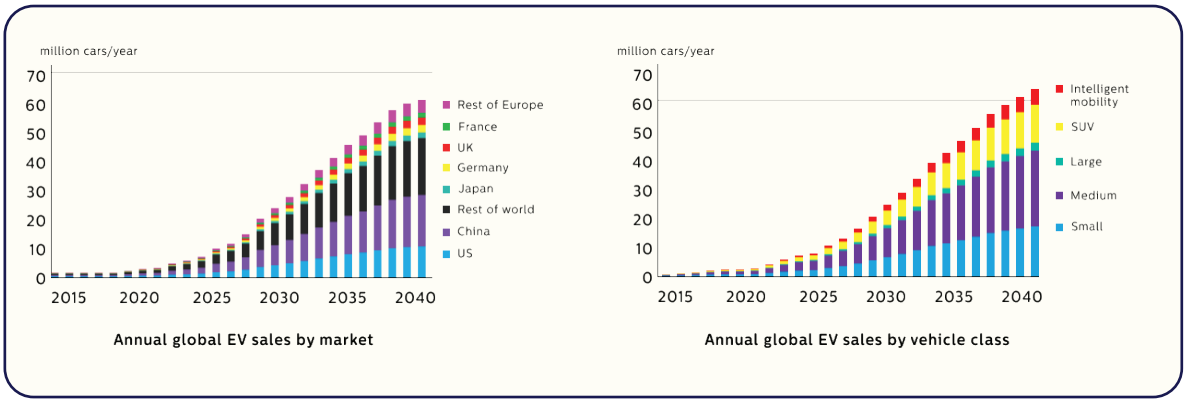


Fig.7 Ref.16 Fig.8 Ref.16

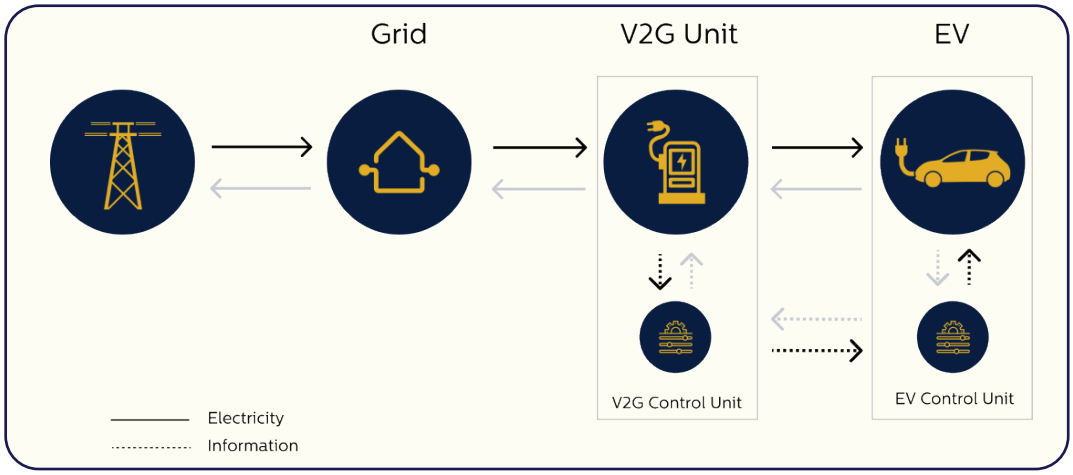


Fig.9 EV Charging

While electric vehicles are focused on reducing the consumption of fossil fuels such as diesel, petrol, and CNG, thereby helping to curb air pollution by reducing the emission of greenhouse gases (GHG), EVs still need to charge their batteries. And EV charging at present time requires a lot of electrical power.

This electrical power consumed by EVs is generated from power plants using highly polluting coal and natural gas resources. So in general, EVs will not significantly reduce fossil fuel consumption.

Mining of Cryptocurrencies:

Many crypto exchanges have emerged globally to date, supporting the trading and swapping of over 10,000+ tokens and coins.

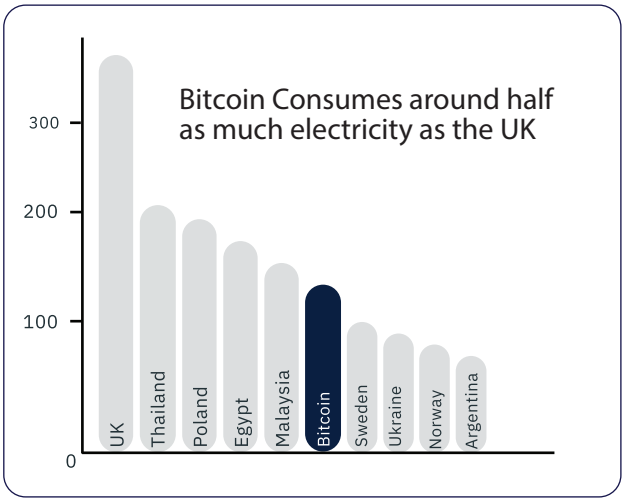
Top20 Mineable Cryptocurrencies By Market Captalization On 03/27/2020

#	Name	Symbol	Algorithm	MarketCap (USD million)	Market Cap (%)	Rated power (kwH)	Rated power (%)
1	Bitcoin	BTC	SHA-256	122.768	79.69%	4291.366	68.39%
2	Ethereum	ETH	Etash(a)	15.209	9.87%	719.087	11.46%
3	Bitcoin Cash	BCH	SHA-256	4.183	2.72%	153.374	2.44%
4	Bitcoin SV	BSV	SHA-256	3.181	2.07%	120.077	1.91%
5	Litecoin	LTC	Scrypt	2.595	1.68%	164.796	2.63%
6	Monero	XMR	RandomX(a)	864	0.56%	210.277	3.35%
7	Dash	DASH	X11	639	0.41%	37.386	0.60%
8	Ethereum C	ETC	Ethash(2)	597	0.39%	43.278	0.69%
9	Zcash	ZEC	Equihash	310	0.20%	49.022	0.78%
10	DogeCoin	DOGE	Scrypt	229	0.15%	157.494	2.51%
11	Bitcoin Gold	BTG	ZHash(a)	133	0.09%	8.949	0.14%
12	Decred	DCR	Blake	125	0.08%	22.013	0.35%
13	RavenCoin	RVN	X16Rv2(a)	89	0.06%	270.792	4.32%
14	MonaCoin	MONA	Lyrn2REv2	85	0.05%	7.844	0.13%
15	Bytom	BTM	Tensority	61	0.04%	2.915	0.05%
16	SiaCoin	SC	Sia	55	0.04%	4.664	0.07%

Fig.10 Ref.24

These exchanges provide tremendous investment opportunities for investors in various decentralized projects launched by multiple stake holders globally. In the past decade, the world has seen massive adoption globally for these currencies & tokens.As the data below shows, most of the market is dominated by bitcoin, ethereum in terms of market capitalization. Proportionate are their power consumption rates too.

Bitcoin alone is responsible for 2/3rd's of the consumption. These cryptocurrencies consume a lot of electricity, making the grid unstable sometimes. The picture below shows that only Bitcoin is consuming electricity, which is more than the consumption of the entire country, like Sweden, Argentina, and many countries.



Ref.18 Fig.11

This has a major impact on global warming. Hence, most of the cryptocurrencies are shifting to use renewable energy for their operations and thus go green or switch to POS which could be the carbon haven for cryptos.

Recent studies show that about 50% of the energy powering mining comes from renewable energy sources.

2.2 Growing Global Energy Demand:

Fast growing industries of the current day include Energy, Agriculture, Transportation, Pharma & Healthcare are taking an extra mile to be not just profitable but also environmentally sustainable and have governance systems that ensure fair price, working environments for stake holders.

The global installed capacity of agrivoltaics, or the co-development of the same area of land for both solar power and agriculture, has grown rapidly from about 5 MW in 2012 to approximately 2,900 MW in 2020. The main driving factor for growth in this segment is the need to continue to build solar projects to mitigate climate change in the available agricultural land, improving the carbon footprint of the projects while also generating RE and produce. Sustainability is growing to be a key factor across the supply chains from seed to the table.

Growing demand for low emission commuting has led to an increase in demand for electric vehicles and the global market was valued at $162.34 billion in 2019 and is projected to reach $802.81 billion by 2027 at a CAGR of 22.6% with Asia-Pacific being the highest revenue contributor.

The global MedTech market is projected to grow from $455.34 billion in 2021 to $657.98 billion in 2028 at a CAGR of 5.4% in forecast period, 2021-2028. The global pharmaceutical manufacturing market size was valued at USD 405.52 billion in 2020 and is expected to grow at a compound annual growth rate (CAGR) of 11.34% from 2021 to 2028.

"To meet the 2016 Climate Change agreement, the overall pharmaceutical sector would have to reduce its emissions intensity by about 59% from 2015 levels. A 2019 report found that healthcare's climate footprint is equivalent to 4.4% of global new emissions, the equivalent of two gigatons of carbon dioxide a year.

2.3 Sustainable Finance Market & ESG

As every sector comes up with their own ESG standards, all market players pursue to become ESG Compliant when investors choose to invest majorly into companies which are socially & environmentally conscious. Global ESG assets are on track to exceed $53 trillion by 2025, representing more than a third of the $140.5 trillion in projected total assets under management. A perfect storm created by the pandemic and the green recovery in the U.S., EU and China will likely reveal how ESG can help assess a new set of financial risks and harness capital markets.

According to a report by the Climate Bond Initiative, global issuance of green bonds is on track to reach between $400 Bn and $500 billion in 2021, nearly double the record high of $270 billion in 2020, with $54 Bn invested in ESG bond funds in the first five months of 2021 alone.

2.4 Blockchain & Cryptocurrencies

Blockchain, with its ability to create more transparency and fairness while also saving time and money, has applications that go far beyond cryptocurrency and bitcoin. The technology is impacting all sectors in ways that range from how contracts are enforced to making governance work more efficiently.

The defining structures of our economic, legal, and political systems are contracts, agreements, deeds and transactional records. They protect assets and set organisational boundaries. They govern interactions among nations, organisations, communities, and individuals. They guide managerial and social actions. But often they're stuck in between bureaucracies which increase the cost and time of transactions. In a digital world, it is imperative we change the way we regulate and maintain administrative control.

Blockchain promises to mitigate such problems. Effective leveraging of data in a manner that is foolproof, verifiable, and authentic is the corner-stone of an enterprise's growth.

Markets are still exploring blockchain and its applications in everyday lives remodeling how we use and let others use our data. It is also an effective tool to prove the authenticity of digital assets.

The Global Blockchain Market is estimated to be USD 5.3 Bn in 2021 and is expected to reach USD 34 Bn by 2026, growing at a CAGR of 45%. The market cap of the entire crypto market broke $2.6 trillion in Oct 2021, according to data from CoinGecko.

Transparency and trust are the founding principles of blockchain, which, along with its immutability and ability to digitally represent assets moving along value and supply chains, makes it the standout technology to introduce traceability into industrial processes. By using Blockchain to verify transparency in a way that no other digital technology can, businesses will dramatically improve their sustainability credentials and reporting procedures.

2.5 Market Opportunity:

The global energy demand is growing every day as the population grows, economies thrive & more parts of the world get electrified. The current electrification state of the global population is at 84%. Our dependency on non renewable resources even started to trigger coal crises across nations, with many states hitting power outages

across the globe as energy crisis bites.On other hand, the high consumption rates of modern economies continue to raise greenhouse emissions. Replacing fossil fuels usage with renewables will take time and require many stake holders to be connected, facilitated with right tools powered by scalable, safe and secure technologies.

The current bottlenecks for the industry as listed above can point to opportunities to create better experiences for energy buyers, generators & other intermediaries to interact, trade & track energy more efficiently.

Growing decentralized ecosystems, networks & organizations powered by blockchain & cryptocurrencies show us promising ways to build decentralized applications that can ease global energy trade and help transition economies become sustainable for the people, planet while being profitable and fair.

As markets shift from embedding logic in less secure applications to having secure fat protocol layers, there's a lot of scope for building products, companies or DAO's on web 3.0 which can redefine the lifecycles & global trade of PPA's and sustainability credits. De-Fi solutions open up access to banking for the unbanked and unregulated markets.

By building a protocol layer that facilitates Renewable Energy trade & sustainable financing, we can open up the markets for all players to transact even in trustless environments. Equipping them with tools needed to analyze, track and manage their ESG investment portfolios, building a Sustainable Future won't be underpinned by lack of resources, liquidity or technology anymore.

3. Richmint Solution

Tokenized Renewable Energy

RICHMINT facilitates the global shift towards the generation and consumption of Renewable Energy by making the renewable energy purchase and disposal process simple, ficient and transparent by tokenizing RE.

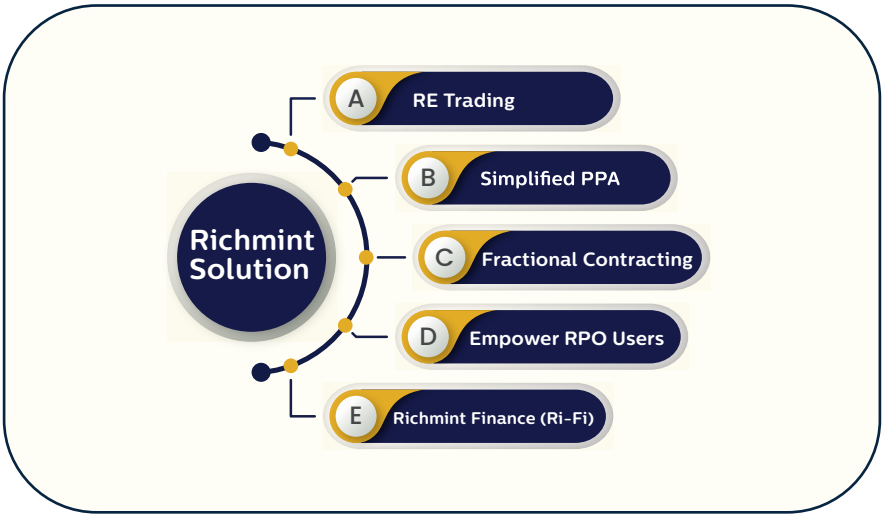


Fig.12

3.1 RE Trading

RICHMINT ecosystem is designed to address the major concerns of all the stakeholders in the Renewable Energy business. It brings forth a decentralized renewable energy procurement and trading platform that supports an ever-expanding suite of energy applications, clubbed with an smart RE trading token.

RICHMINT trading platform connects organizations seeking to procure renewable electricity (Energy Buyers) directly with owners of renewable energy projects (Project Owners) and provides both parties with standardized tools and contracts to enable the transaction. In the ecosystem RE buyers, RE generators, investors, and government agencies are involved in the transmission and wheeling of electricity from the generator to buyer.

RE generators will be free to list their goods and services related to renewable energy. And buyers will be able to find the most suitable RE Generators according to their needs easily. The platform will allow them to perform search, listing, make queries, make transactions, and many more activities. It offers an operating system for new energy markets enabling tracking and trading of energy, offer flexibility services and also trade environmental commodities. Unlike existing ecosystems, RICHMINT will be more inclusive, accommodating even small and medium size RE Generators.

3.2 Simplified PPA

A successful buyer is issued with a digital PPA (Power Purchasing Agreement) that includes the price and quantity received in the closing deal. There will be a schedule-based settlement between the project owners and the energy buyers based on the terms of the PPA. The terms of the PPA can be downloaded & reviewed by Energy buyers and project owners before joining the platform and they then decide whether they can accept the terms and therefore participate in the auction.

By Tokenizing PPA, it only needs to be reviewed once, even online, reducing overall transaction costs and simplifying regular use of the platform for buyers and Renewable energy sellers/ generators. The platform will facilitate the establishment and execution of PPAs and other legally valid agreements and understandings to enhance the quantum of Renewable Energy Power generation and consumption, which further brings a direction towards achieving the COP 21 targets by the participating countries.

3.3 Fractional Contracting

By simplifying the contract process and providing the opportunity to take a smaller portion of the total volume, RICHMINT is opening up the PPA market for buyers who previously could not participate in this Green energy revolution. RICHMINT is enabling all companies, regardless of their size, to become greener in a cost-effective and alternative way.

3.4 Empower RPO Users

In many economies globally, the government has mandated the use of a certain percentage of Renewable Energy Power of the total consumption by large electricity consumers. This is called Renewable Power Obligation (RPO), which if not met by the end consumer, will result in penalties and business non-compliance.

The RICHMINT platform, which is bringing together a large number of renewable energy buyers and renewable energy generators in one place, will help potential RPO users to easily identify. RE generators and meet the criteria by purchasing renewable energy power. The ability to tokenize RPO's can enable users to trade their contracts on the secondary markets to avail liquidity. The platform also establishes the procedure and guidelines for obtaining & tokenizing Renewable Energy Certificates (RECs).

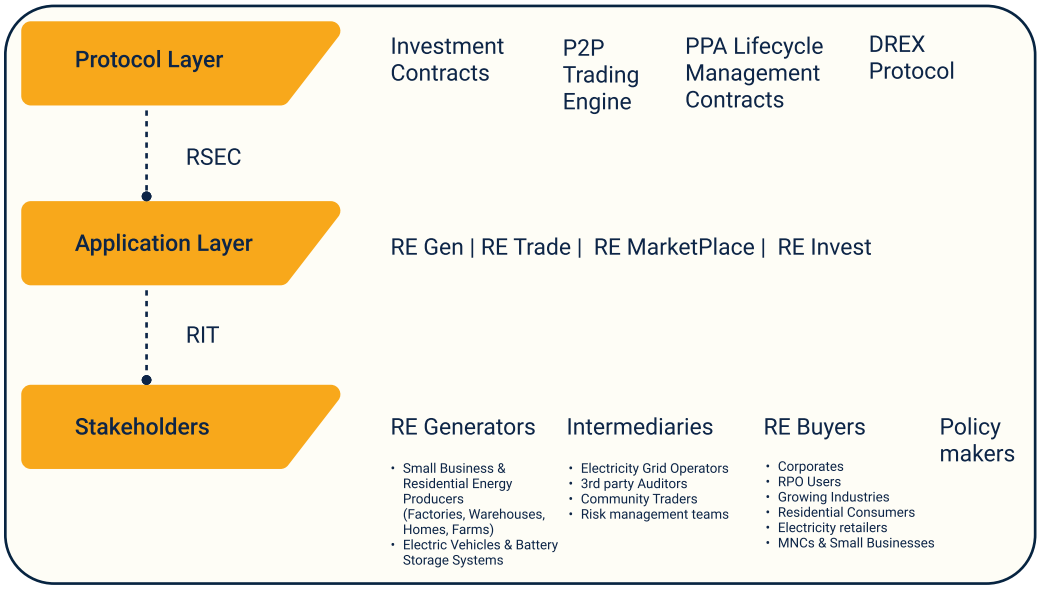
3.5 Richmint Finance(Ri-Fi)

Apart from RE buyers and RE generators, this ecosystem also includes investors and fund houses, which provide funds for setting up RE and sustainable projects. The platform will provide the investor community with substantial data for their due diligence and exposure to a large number of projects available on the platform.

Growing demand for ESG compliant companies to invest in, demands for features that enable investors to be able to verify, track ESG data in real time. When communicating ESG achievements, companies need quantitative metrics that verify their progress and authenticate what they are saying. Against a backdrop where corporate ESG activity is increasingly scrutinised by both regulators and ever more socially and environmentally conscious consumers, simply setting goals isn't enough. This means identifying key performance indicators (KPIs), measuring their position today, defining targets, and then developing and applying a plan to deliver these. As that plan is implemented, organisations must regularly report on their KPIs so that there is an

auditable record of how they have come to achieve their goals. RICHMINT offers users with tools needed to verify, track, and analyze their ESG portfolios.

4. RICHMINT Value Proposition



(*Ref.sec.6.3 for RSEC & RIT) Fig.14

Energy Generators

Project Owners are able to better contract the electricity output of their projects to a wider range of buyers, making it easier for their projects to secure financing. The platform facilitates users looking to set up RE projects to connect with suppliers, OEM, contractors, installation teams across the globe. It also offers PPA's auctioning functionalities with auto-bidding, optimization & settlements. NFT Collatorization with fractional contracting & access to liquidity from De-fi to scale further.

Energy Buyers

Energy Buyers are able to reduce their electricity costs to below-market rates at any given time with full transparency and ease. The focus is to encourage the end consumers to take power

generated from renewable energy sources like solar, wind, and Hydel without having to go through a haze of procedures and middlemen, thereby saving on time and cost to serve.

Blockchain is an agreement machine that can facilitate the financial settlement of these transactions, in the same trading intervals in which the energy is produced and consumed, and it can be achieved at a speed not possible using current market settlement technologies.

The electricity thus produced and supplied to the end consumers will help in reducing the consumption of electricitygenerated from fossil fuels like coal and thus achieve the objective of pollution control. To accelerate this global revolution, RICHMINT is launching several activities to educate and encourage people to reduce all sources of pollution continuously. With the RE purchase experience simplified, enabling energy buyers with Renewable Purchase Obligations is a prime milestone for the RICHMINT ecosystem.

Investors

Investors can find projects with credible sustainability grades or matching ESG criteria to invest into and will be empowered with ample amounts of data, options & tools to diversify & track their energy portfolio's. Blockchain enabled platforms offer a way to standardise data, assess asset performance, and enhance compliance such as sustainability or ESG standards. Platforms will be further augmented when they are integrated with remote sensors (internet of things), or linked to deep analytics like artificial intelligence applications.

Integrated to De-Fi lending and features to tokenize the certifications proving sustainable credits into NFT's, investment opportunities are opened for a global range of investors to jump in. The defi space can efficiently accommodate shared ownership of renewable energy assets and allow trading renewable asset ownership.

As the market for distributed energy resources like solar photovoltaic systems (PV), batteries, microgrids and embedded networks boomed in the last few years, the power balance moved from central authorities to the edges of the grid, to where citizens have control. The possibility for Citizen-Owned Microgrids is a leap in technology that by-passes the mistakes of the past and supports the development of low-cost, low-carbon, and democratic power systems all over the developing world.

Market Intermediaries

Market Intermediaries like energy brokers, consultants, flexible load providers etc can use RICHMINT's standardized tools, contracts and processes to deliver cost-effective services to a new segment of Energy Buyers, creating new business opportunities for themselves in the process.

Access to Decentralized Renewable Power for all

RICHMINT is in short a power system that is resilient, low-cost, and owned by the platform which can adapt to the needs of various markets with different approaches to energy procurement. A new component of the distributed economy that allows consumers to realize the value of their investment in distributed RE by allowing them to monetize their excess energy in much the same way as Uber and AirBnb allow people to monetize their idle cars and spare rooms.

Also Decentralized RE remains at the forefront in the fight against poverty and climate change. Small and Medium Enterprises (SME) forces are blended together to provide an alternative to state-owned utilities and other large energy providers in poor and developing countries. RICHMINT will capacitate entrepreneurs providing alternative energy supply in remote and rural areas. Decentralized RE will open up scope for more jobs, lower energy costs, and reduce carbon footprint and greenhouse gas emissions.

Sustainable Ecosystem

While the consumers of renewable energy are across all sectors, with existing partnerships and expertise in thriving industries, RICHMINT plans to target the industries like EV, Agriculture, Pharma, Med Tech and benefit them immensely in their power buying capacity of renewable energy. RICHMENT Foundation empowers these domains by easing integrations and building necessary standards to meet the energy demand of these industries with renewable power.

It is projected that there are between 2 to 20 million EVs in use worldwide by 2020. This is estimated to grow to between 18 to 60 million by 2025; and between 22 to 140 million by 2030. Electric vehicle (EV) public charging stations that can buy Renewable Energy Power and further improve their commercial viability. EV Stations, Farms, might also be interested to upgrade by deploying their own RE Gen setups on idle rooftops to improve profitability and also ESG grades. Stakeholders connected to RICHMINT will be able to leverage a suite of De-Fi protocols and applications for Sustainable finance along with a Renewable Energy Marketplace.

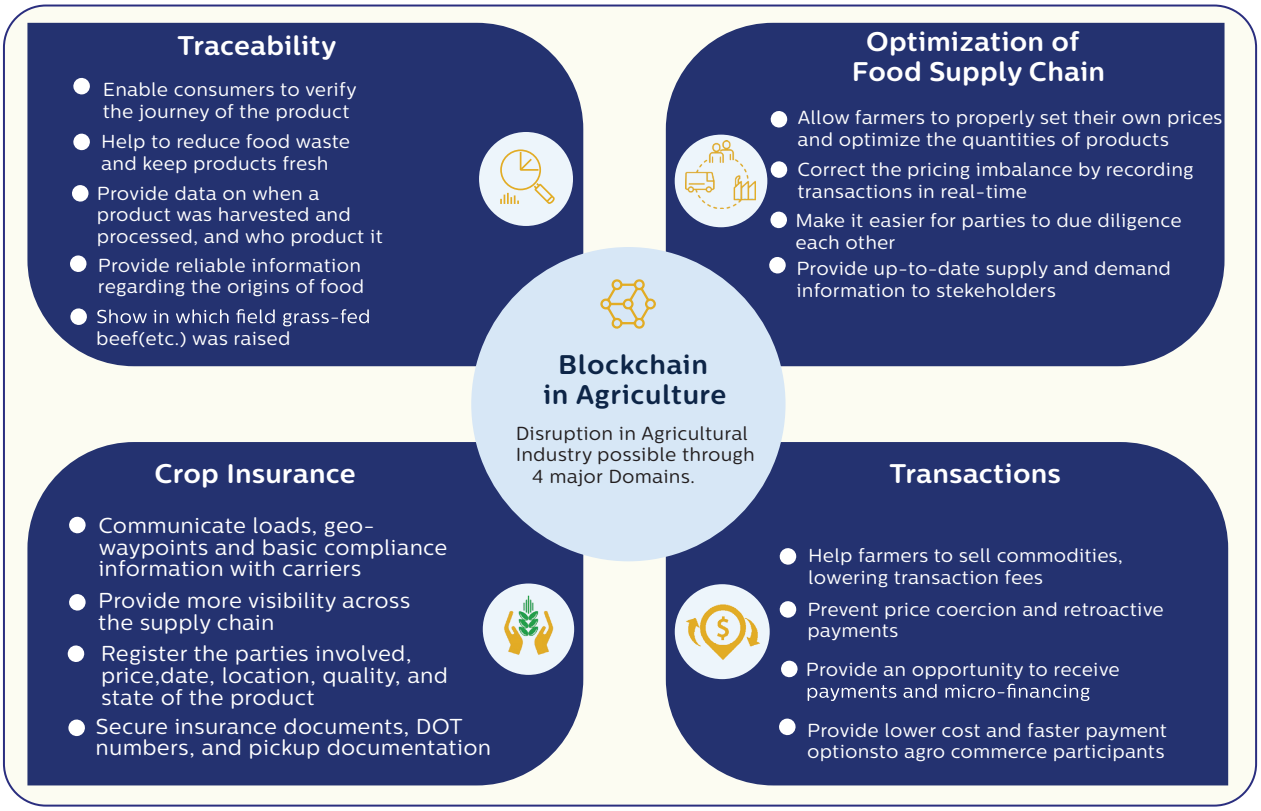
5. Platform Broadbanding

RICHMINT is a well-diversified group with business interests in Agricultural commodities, Solar energy generation, and trade, minerals and metals, EV charging infrastructure development, Pharma manufacturing, Healthcare, Med-Tech, FinTech services, e-commerce, and media. RICHMINT DIGITECH SERVICES OÜ is part of Richmint Group of. Companies that are on the way to bring green revolution.Richmint Digitech Services OÜ facilitates the global shift towards the generation and consumption of renewable energy by making the energy purchase, investment, and disposal process simple, transparent and accessible to all.RICHMINT will release utility tokens for multiple use cases depending on the business requirement. Bulk consumers of electricity such as all types of industries, large hospital and hotel chains, educational institutions today face many challenges in procuring green power to meet their demands.

While the challenges related to government and local body policies are discussed and resolved to a great extent from time to time, consumers face many challenges for procurement, distribution, and payment settlement between suppliers and end consumers.

The main focus is to encourage the end consumers to take power generated from renewable energy sources like solar, wind, and hydel. The electricity thus produced and supplied to the end consumers will help in reducing the consumption of electricity generated from fossil fuels like coal and thus achieve the objective of pollution control.

6. RICHMINT Dao and Use Case in Agriculture



6.1 Optimization of the Food Supply Chain

Providing information on the origins of food products is essential to ensure customer loyalty and confidence. Blockchain can essentially make any fruit or vegetable as safe to buy as the ones grown locally from a nearby farm.

Providing information on the origins of food products is essential to ensure customer loyalty and confidence. Blockchain can essentially make any fruit or vegetable as safe to buy as the ones grown locally from a nearby farm.

With traditional supply chains, food retailers do not have an effective way of ensuring that all products were grown under conditions specified by a given supplier. That's why retail giants such as Walmart, Unilever, and Carrefour already resort to Blockchain for tracing food products' places of origin.

Moreover, the time it takes to track the origin of food is also massively cut down. Taking Walmart as an example, it took nearly a week to trace the origin of their mangoes. Through the Blockchain, this time is cut to a mere 2 seconds.

In case a product is not up to a retailer's standards, limiting the time it takes to trace a product's source is crucial as it empowers retailers to isolate this product more quickly thus minimizing the risk of harm to humans.

6.2 Transactions

Blockchain in agriculture is uniquely positioned to help not only simplify transaction processes but also to level the playing ground for small-scale farmers and crop growers, especially from poor regions.Another benefit blockchain brings to the table is the ability for agricultural producers to set prices more efficiently and effectively. This allows managing their output to match the demand for their products.

6.3 Crop Insurance

In Agriculture, smart contracts have unique implementations in the form of helping farmers insure their crops and claim damages with insurance companies. Normally, it is a painfully slow and burdensome process, both on the side of the grower and the company that insures them.

Unpredictable weather anomalies make it difficult to correctly estimate and quickly report the exact losses they cause. This leaves room for fraud and makes the process an operational nightmare.

Through setting up tailored smart blockchain contracts, the damage claim can be triggered via changes to weather conditions that meet certain criteria, easing the process for farmers and insurers.

6.4 Traceability

Demand for organic, local products is constantly rising. Blockchain enables consumers to verify the journey of their product, tracing it from farm to table.

Moreover, it also provides data on when a product was harvested and produced as well as who produced it. This goes as far as to show consumers in which field their grass-fed beef, amongst other products, was raised – in a matter of seconds.

7. RICHMINT DAO and Use Case in Health Care

Key concerns with Blockchain applications in healthcare include:

- Network infrastructure security at all levels
- Identity verification and authentication of all participants
- Uniform patterns of authorization to access electronic health information

Applications in Healthcare
Blockchains in healthcare can be envisaged applications include the following.

7.1 Seamless switching of patients between providers

The same information on the Blockchain could allow individual patients to easily unlock and share their health data with other providers or organizations, through a shareable private key.

This could help to make health information technology (HIT) interoperable and collaborative between different users.

7.2 Faster, cheaper, better patient care

Blockchain can create a single system for stored, constantly updated, heath records for secure and rapid retrieval by authorized users. By avoiding miscommunication between different healthcare professionals involved in caring for the same patient, innumerable mistakes can be prevented, faster diagnosis and interventions become possible, and care can be personalized to each patient.

7.3 Interoperable electronic health records

The Blockchain could provide a single transaction layer where organizations can submit and share data through one secure system, by storing a specific set of standardized data on the chain, with private encrypted links to separately stored information such as radiographic or other images.

7.4 Data security

Each individual has a public identifier or key and a private key, which can be unlocked only as and for the period necessary.Moreover,

hacking would be limited by the need to attack each user individually to obtain private information. Thus, Blockchains can provide an immutable audit trail of health information.

7.5 Mobile health apps and remote monitoring

Mobile health applications are becoming more important nowadays, with advancing technology. In this context, electronic medical records (EMRs) were found to be kept secure in a Blockchain network, and the data can be sent to medical personnel rapidly, as well as being available for self-monitoring and home care as well.

7.6 Tracing and securing medical supplies

Blockchain can help secure, and identify the trail of, pharmaceutical supplies, with full transparency. It can even provide monitoring of the labor costs and carbon emissions involved in the manufacture of these supplies.

7.7 Health insurance claims

The blockchain is uniquely adapted to claim processing because of its ability to present medical events as they occurred, without the potential for changing the data at a later stage for purposes of fraud.

7.8 Tracking diseases and outbreaks

The unique capabilities of blockchain can help real-time disease reporting and the exploration of disease patterns that can help identify its origin and transmission parameters.

7.9 Safeguarding genomics

With many companies bringing DNA sequencing to the individual, genomic data theft has become a major issue. Blockchain can prevent this, and even provide an online marketplace where scientists can buy genomic information for research purposes.

This could promote safe selling and eliminate expensive middlemen.

8. Renewable Energy Ecosystem

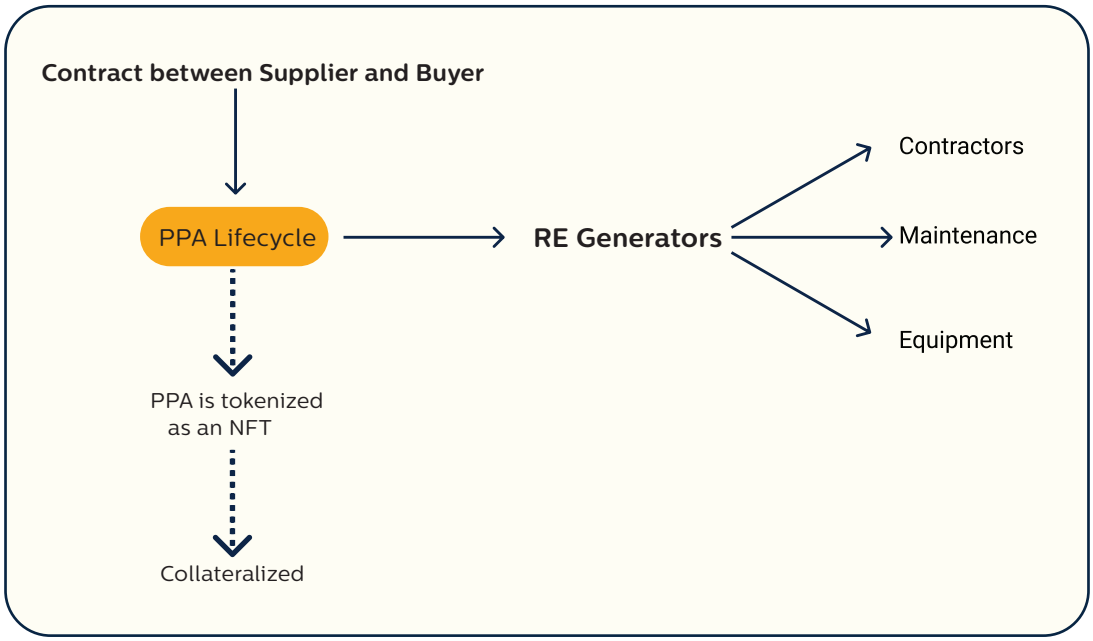


Fig.15

RICHMINT Group brings together stake holders from across the globe to create a renewable energy ecosystem that helps craft the next gen technological layer. Investors of all ranges play a very crucial role to drive the adoption of Renewable energy.

8.1 DAO

A Decentralized Autonomous Organization(DAO) is created to oversee the building, testing & shipment of the global RE energy trade experiences. The DAO pools in global talent pools and incentivizes them to create necessary protocol layers & Dapps for all stake holders to invest, manage & trade PPA's.

Smart contract creation

First, a developer or group of developers must create the smart contract behind the DAO. After launch, they can only change

the rules set by these contracts through the governance system. That means they must extensively test the contracts to ensure they don't overlook important details. The smart contracts are audited to ensure that all trades are conducted as per industry standards.

Funding

After the smart contracts have been created, the DAO will determine a way to receive funding and how to enact governance. A fraction of all transactions are routed to the DAO treasury which will then be further used for the development of DAO. RMW tokens give holders voting rights.

Deployment

Once everything is set up, the DAO will be deployed on the blockchain. From this point on, stake holders decide on the future of the organization. The organization's creators those who wrote the smart contracts no longer influence the project any more than other stake holders.

Richmint Smart Energy Contracts(RSEC) are standard contracts users on the blockchain can interact with RICHMINT Renewable Energy Token(RIT) is the stable coin used to store the PPA stakes and trade.

Partnerships with incumbents, other protocol projects will be done. Bringing Decentralized RE Trade to the markets will be possible using RMW Token and the P2P trading engine.

Those having the RMW token will be able to access services across the RICHMINT RE Ecosystem. Entrepreneurs are educated about the benefits of switching their power source to RE and incentive pools will be created to fund projects leading to adoption for services on RICHMINT RE Ecosystem. Here is an outline of the ecosystem overview.

8.2 Applications

Carefully crafted to facilitate the digital interaction between stake holders & to make the RE Trade experience intuitive and seamlessly efficient, Open source software Decentralized applications (Dapps) are offered for RE producers, RE buyers, partners and investors so they can track, trace and trade every kilowatt of energy. From setup to creation, tokenizing & exchanging RE across a sustainable RE Grid, the building blocks are structured as below.

8.2.1 RE Gen

Renewable energy generators will be able to plug in and start exchanging with the grid as they deploy the necessary metering & other IoT components with their renewable energy setups. RICHMINT works with the project owners to onboard their projects to their platforms, specifying the details of the project, the volume available, the term of the contract, minimum price, the auction's success criteria (eg. minimum volume sold, maximum number of winning Buyers, etc), and the auction period. Grid requirements can be identified by RE generators and then they are enabled to create a bidding and contracting mechanism for distributed energy resources.

Decentralized RE market management

This class application facilitates real time metering data collection, user identification and fast transaction settlement. Application provides optimized metering data, the collection of big data, right to access and dispatch of assets, rapid transaction settlement, network load balancing, frequency management, demand side response, and demand side and load management. The optimization of network assets is made viable by the near real-time remuneration of asset owners. Those with equipment to offer flexible loads can list their services on the platform.

8.2.2 PPA Lifecycle

DApp to fully manage the lifecycle of PPA's. From onboarding users, auctions, bidding to tokenizing and trading RE as RMW tokens, the whole experience is optimized to be efficient, fetching a fair price to the RE Generators.

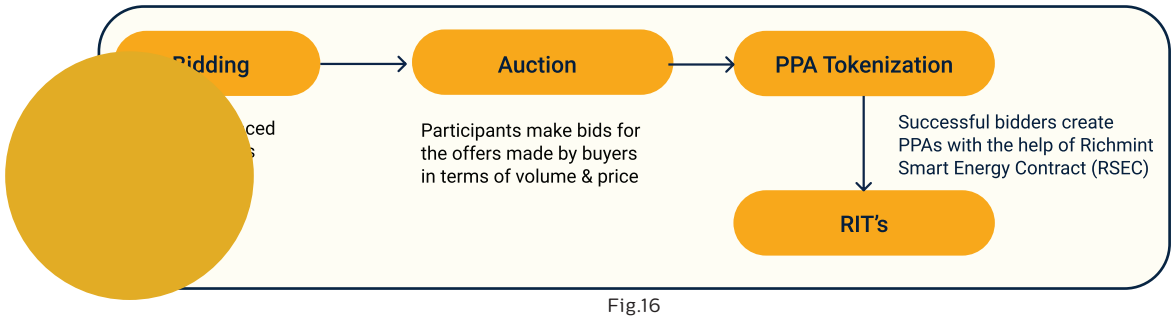


Fig.16

Bidding

Auction business logic is implemented via smart contracts in the Dapp. RICHMINT smart energy contracts can bring standardization to the way PPA's are traded in the market. It offers streamlined processes with auto bidding, optimization and settlement. Auction participants make bids for energy volume (in KWh & MWh) and unit price (in $/MWh).

Buyers are enabled with data of 12 month production capabilities of a project, on top of which they can use RICHMINTs tools to find the best match to its consumption profile. Energy Buyers will be able to choose RE projects that best fit their energy needs, sustainability goals & other procurement criteria, from a huge range of different renewable energy projects. Buyers can proceed to the auction once they pick a project that suits their needs. The auction environment provides participants with all the necessary data about the specific project and auction progress. Before the auction. Energy Buyers are able to download a copy of the PPA and have it reviewed by their internal or external legal counsel.

Auction

Prior to general auction, a REE auction happens where the starting price is fixed and the volume of electricity the participant can bid for is limited by the number of RMW tokens owned and the credit score. Then a General Auction happens where the winners are ranked based on the offered price and volume.

Bids are placed by RE Buyers for the volume of energy they desire and the price they are willing to pay. Once a bid is made it cannot be changed; RE Buyers can, however, make multiple bids. If the aggregated volume in demand exceeds that available, then RE Buyers with the lowest value bid (ie. volume x price) may be removed from the buyers group pending the submission of a higher bid.

PPA Tokenization

The auction is concluded when the auction period ends. At the conclusion of the auction, the bids are ranked and successful bidders are decided. If the auction's success criteria are met then the auction is successfully concluded and PPAs are created; otherwise, the auction is deemed unsuccessful and all bids are canceled.

The terms of the successful auction are encapsulated in RICHMINT Digital PPA, which will govern the allocation of energy (via RICHMINT RE Token(RIT)) to each Buyer and underpin the settlement process.

RICHMINT uses Blockchain for these digitized PPAs to achieve the contract transparency, auditability and proving its authenticity. The results of each successful auction are stored in Blockchain as RIT's using RICHMINT Smart Energy Contracts(RSEC). A RICHMINT RE Smart Contract is an application existing on Blockchain. Users of the blockchain can interact with the contract. RSEC operations are performed on the Blockchain and the results are validated (immutable, transparent and decentralized computing).

RICHMINT Energy Tokens(RIT) represents the share of rights and obligations obtained under the PPA. Holders of RIT can sell the fractional ownership of PPA settlement periods (RIT Shares). RICHMINTs RIT can be seen as a container to store PPA stakes over time. Each RIT represents a monthly time interval. The time intervals can be altered if needed in future. The tokens are unique in their existence on Blockchain and they enable the secondary market trading.

PPA Analyzer

The PPA Analyzer allows RE Buyers to monitor the progress of ongoing auctions, where they have made bids as well as review the performance of existing PPAs. The Buyer can see how much renewable energy was actually produced by a project and compare it to the estimates and their consumption profile.

All the summary of the tokenized PPA, the project,original PPA documents, status, the volume available, the term of the contract, minimum price, the auction's success criteria (eg. minimum volume sold, maximum number of winning Buyers, etc), the auction period and much more can be viewed in a PPA dashboard.

A cryptographic hash of the 2 documents on the Blockchain is stored which links with the original PPA and all related contractual documents. Anybody across the globe will be able to validate the PPA document's authenticity with this hash. They can at any time, query the results of the auction and how the shares are split. The ownership of these tokens is stored via pseudonyms (the buyer's public key address), while every trade or transaction can be observed on Blockchain and remain available as an immutable record in the future.

8.2.3 RE Trade

Tokenization of RE enables P2P RE Trading using digital trading engines. RE Generators, RE buyers (or in an unregulated environment, the consumers themselves)

will be able to simply trade sustainable electricity with one another and receive payment in real-time from an automated and trustless reconciliation and settlement system. Features such as being able to select a clean energy source, trade with neighbors, receive more money for excess power, benefit from transparency of all your trades on a blockchain, and very low-cost settlement costs, all lead to lower power bills and improved returns for investments in distributed renewable energy space.

Renewable Energy Retailers can be empowered with tools to effectively aggregate the consumer preferences and match with suitable demand. Wholesale market settlement options can be offered to attract more B2B markets. Decentralized RICHMINT Exchange Protocol(DREX) will facilitate trade with other decentralized markets further decentralizing the RMW token.

8.2.4 RPO's & REC's

Renewable Purchase Obligation (RPO) is a mechanism by which the Electricity Regulatory Commissions oblige entities to purchase a certain percentage of power from renewable energy sources.

The concept of Renewable Energy Certificates (RECs) seeks to address mismatch between availability of renewable energy and the requirement of the obligated entities to meet their renewable purchase obligation (RPO) by purchasing green attributes of renewable energy remotely located in the form of RECs. The REC mechanism is a market based instrument, to promote renewable sources of energy and development of the RE market.

On the RICHMINT platform, a large number of renewable energy buyers and renewable energy generators pool together enabling potential RPO users to easily identify RE generators and meet the criteria by purchasing renewable energy power from them. RICHMINT DAO will facilitate all eligible RE generators and buyers to process and obtain carbon credits.

8.2.5 RE Marketplace

Our ecosystem will feature a decentralized marketplace that will connect renewable energy project owners with suppliers, consultants and other intermediaries. Stake holders will be free to list their goods and services related to renewable energy and buyers will be able to find and make purchases through the marketplace.

RICHMINT will add products, equipment, tools, machinery manufacturers who share the same niche to the platform. All these manufacturers will be able to list and sell all their products and services on our platform. Along with bringing manufacturers, renewable energy sellers, and buyers on our platform we will also bring RE installation workers into our ecosystem.

One can trade RE Energy as PPA's. One can also tokenize Carbon and Renewable Energy Credits(REC's) into NFT's on the platform. Each NFT will be uniquely valuable and priced accordingly. These NFT's can be traded or also be collateralized for liquidity.

8.2.6 Ri-Fi (NFT Marketplace)

RICHMINT Renewable Energy Financing applications will enable markets to open up flow of De-Fi liquidity into traditional markets. Users will be able to access funds for their projects by staking or trading their tokenized PPA's, REC's or RMW tokens. Fractional Contracting options will be provided. Based on the credit capabilities investors are matched with projects that fit their investment appetite.

All these suites of applications are brought together to create a decentralized & sustainable Web 3.0 of renewable power. The easiest way for companies of any size to buy green energy directly from local producers.

8.3 Dual Token Ecosystem

RICHMINT ecosystem is built with a dual token system. One to synchronize the global ecosystem and create cross-market electricity compatibility & a second token RIT, is used for inside ecosystem transactions. Purchasing a sufficient amount of RMW tokens provides RE Retailers access to ecosystem wide services from where they can convert their RMW tokens to RIT and on-board their customer base.

RMW tokens are required to generate RIT. RMW tokens will be escrowed for RIT in an Ethereum smart bond, and can only be unlocked from the smart bond upon the return of the RIT. RIT are a local market level token and are priced for the exchange market they are deployed in, e.g. In the US, 1 RIT = 1 USD. They allow for frictionless transacting throughout the RE Gen applications.

8.4 RMW Token

RMW tokens are tokens created on ethereum blockchain using ERC20 standard. These have been first minted starting with the company's ICO, to act as a means of the digital financial settlement between Renewable Energy buyers and Renewable Energy generators.

Further distribution details are stated below in the token distribution section. Post the deployment of RICHMINT ecosystem and successful launch of RMW Token with a proper marketplace, all these manufacturers, installation teams, generators, buyers & intermediaries will be able to trade all products and services across RE ecosystem with RMW as base unit of exchange.

8.4.1 Token Utility

Inside RICHMINT RE Ecosystem, RMW token acts both as a token & cryptocurrency allowing users to be able to use it for multiple activities. An initial overview of the utility is laid out as below.

Fig.17

Access Token

RMW token allows RE Retailers and their consumers to gain access to the P2P RE trading suite and other RICHMINT applications. One must first stake some RMW tokens to receive RIT's which can then be used to transfer RE through Richmint smart contracts. A priority access is given to RMW token holders to the PPA auctions. RMW token also acts as a token to access various channels on our token gated discord community.

Take part in Governance

All governance is democratized, open and transparent in RICHMINT ecosystem. The DAO foundation, Stake holders, community players with skin in the game and tokens will be eligible to participate in the governance of RICHMINT DAO.

RE Trade

It can be used to make purchases for products & services inside the ecosystem. It's also used for cross border RE trade & remittance payments with a very minimal transfer fee. Settlement of payments on the RMW platform between RE Buyers and RE Generators will take place in RMW and pairs with other tokens like BTC, BNB, ETH, etc will be provided on DREX, DEX's and as compliances are through, even on the centralized exchange markets.

RE Invest

Investors looking to compound or grow the value of RMW tokens they hold will be provided with necessary data and features to be able to Stake, Loan or Invest from one dashboard.

One can stake RMW to offer liquidity to our liquidity pools. One can jump into invest, loan to or help finance certain sustainable RE Gen projects, and make profits on their RMW tokens.

Community Development and Rewards

RMW Incentivize energy consumers and investors in RE Projects. Receive rewards for activities which could help grow the RICHMINT ecosystem. A fraction of all transactions goes into the DAO treasury which will further allocate portions of the funds to fund community development initiatives and also to incentivize players across the RE ecosystem.

As RICHMINT starts offering RE to EV Charging Stations, Pharma, Agriculture, and other growing industries, the increasing adoption widens the utility across, increasing the value of RMW Token. As more of these global users use, trade or lock their RMW tokens, more liquidity will be added into the protocols. Growing adoption with limited supply of tokens signals a highly profitable opportunity for the investors and token holders who have signed support since the inception.

8.4.2 Tokenomics

Period of Sale From - To	State of Sale	No. of RMW (in Mn)	Price per RMW
18 Jan - 04 Feb 22	Pre-Seed	100	$0.01 USDT
07 Feb - 19 Feb 22	Seed	200	$0.02 USDT
21 Feb - 12 Mar 22	Private R1	250	$0.05 USDT
15 Mar - 28 Mar 22	Private R2	300	$0.08 USDT

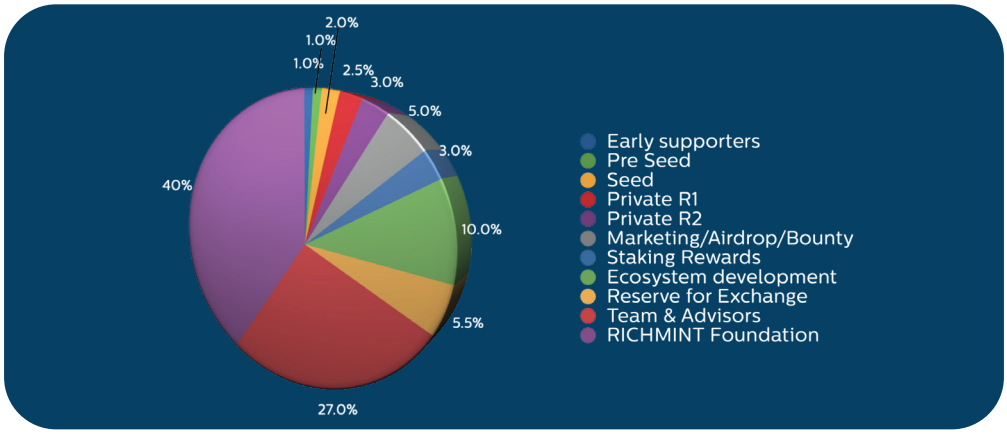


Fig.18

Token Distribution Mechanism

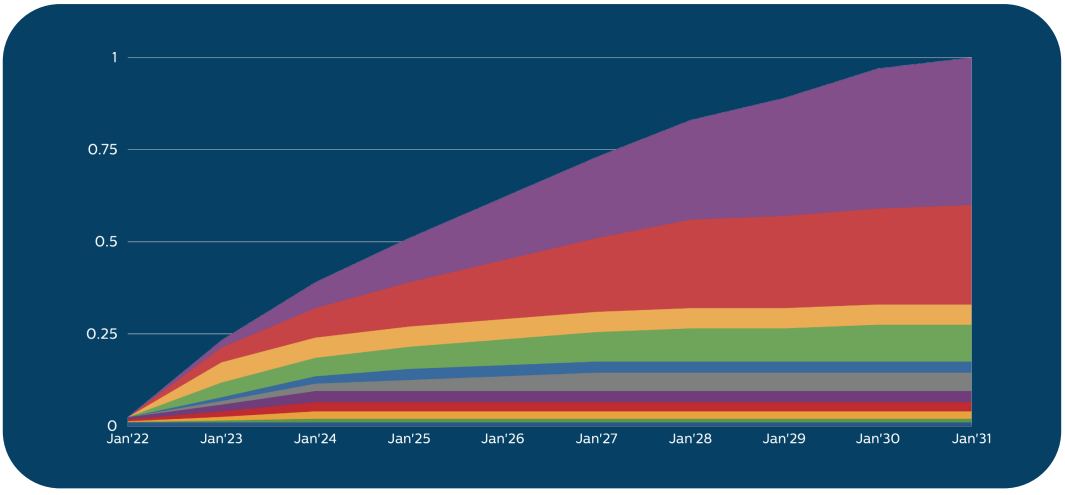
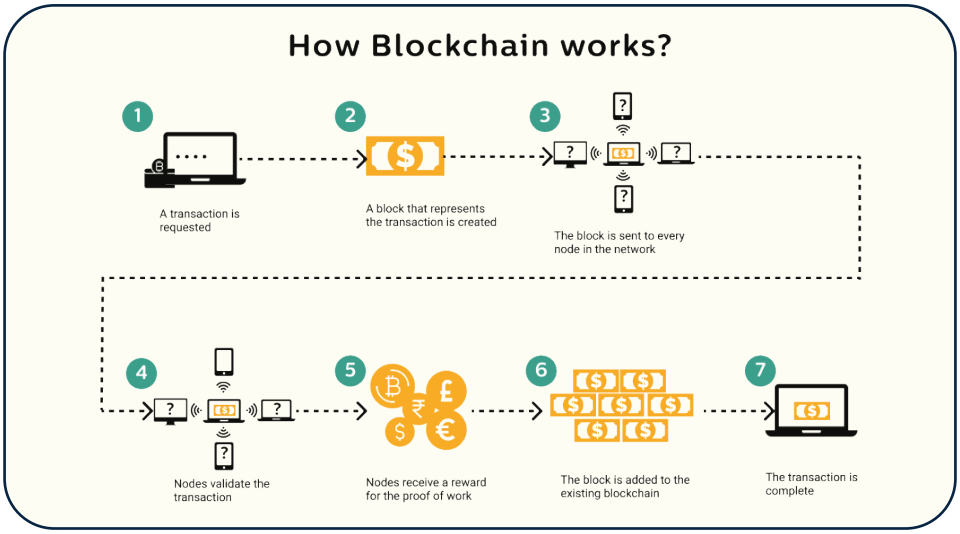


Fig.19

8.5 Technical Overview

Blockhain Technology

Blockchain is the record-keeping technology behind the Bitcoin network. A Blockchain is a specific type of database that records information in a way that makes it nearly impossible to alter, hack or spoof the system.



It differs from a typical database in the way it stores information; blockchains store data in blocks that are then chained together. As new data comes in it is entered into a fresh block. Once the block is filled with data it is chained onto the previous block, which makes the data chained together in chronological order. It simply can be a distributed ledger recording transactions where data is added into blocks and those blocks are distributed across a network of nodes to validate the transactions like in the bitcoin network. Each block in the chain contains a record of multiple verified transactions, and each time a new transaction is introduced on the blockchain, a record of that automatically gets added to each participant's ledger.

RICHMINT DAO

Utilities

Different types of information can be stored on a Blockchain. While the most common use so far has been as a ledger for transactions, ethereum started with ways for people to build smart contracts, decentralized applications on blockchains. Records of property ownership, medical records, supply chain & IoT information, voting and governance data & many other types of data go onto Blockchains today. The key advantages which are driving the adoption of Blockchain are transparency, decentralization, chain accuracy, the ease and efficiency it brings for making global transactions securely maintaining privacy.

We believe that Blockchain is an important technology to accelerate the process of decarbonizing the planet, as it makes transactions traceable, secure, and instant. The immense utility range of Blockchain to record and validate bits of reality marks its need all across the user journey.

We believe that Blockchain is an important technology to accelerate the process of decarbonizing the planet, as it makes transactions traceable, secure, and instant. The immense utility range of blockchain to record and validate bits of reality marks its need all across the user journey.

Interoperability

Matching current day needs, many Blockchain frameworks are offering interoperability as a key feature. Not just for transactions, or to certify that energy comes from a renewable source, we can also use this technology for streamlining contracts between companies. So one can come up with a flow and design a smart contract to execute that flow automatically, verifying the criteria defined by interacting with the data from other blockchains. Blockchain bridging protocols are used to achieve this. Dapps can be formed by clustering few of such user flows. Once adoption kicks in, when there is a need for better performance & efficiency, one can also migrate the information of a specific blockchain to other blockchains.

Cryptocurrencies

It is a digital currency in which mathematical encryption techniques and network consensus protocols are used to regulate the generation of units of currency and verify transactions (i.e. the transfer of funds), operating independently of a central bank. It can be used as a form of P2P digital money, purely relying on the blockchain ledger and verification through encryption algorithms, rather than a centrally controlled entity like a central bank.

A cryptocurrency is a form of highly secure digital currency that can be exchanged for goods, services, and other cryptocurrencies online. In the last few years, companies started issuing their own cryptocurrencies, known as tokens, and these can be exchanged exclusively for a good or service provided by the company. Fiat Currency on other hand is a legal tender that is backed by the sovereign government state that issues it. The Australian dollar and U.S. dollar is fiat money, as are many other major world currencies. This differs from money whose value is underpinned by some physical good such as gold or silver (commodity money).

There are over 10,000+ cryptocurrencies in the market now, and cryptocurrencies continue to spread, raising funds through initial token offerings like ICOs, IEO's, STO's etc. People like the fact that cryptocurrency eliminates central banks and mediators from managing the money supply, as over time these banks reduce the value of money through inflation. Cryptocurrency is safe and transactions with it can be performed instantly without limit.

Smart Contracts

Smart contracts, as their name implies, are auto-executable programs that complete tasks within preset terms of the contract. Smart contracts often follow the logic of contractual clauses. On-chain computer code which serves as computer protocols that facilitate, verify, or enforce the performance of a contract making a contractual clause unnecessary.

Parties can exchange money, property, shares or anything of value in a transparent, conflict-free way, while avoiding the services of a middleman using smart contracts. Ordinarily, such a process would require payment to a middleman, government agency, bank, lawyer or a notary, and then a processing time before the receipt of goods or services. However, with smart contract technology it can all be automated.

We can compare smart contract technology to that of an automated vending machine. With a vending machine, when money is deposited into the vending machine the desired item drops for collection, provided that the correct amount is deposited. With a smart contract, the money is deposited into escrow on the Blockchain for receipt of a transfer of a token (e.g. a digital share of PPA), which is instantaneously transferred into a counterparty's control once conditions are met. Smart contracts not only define the terms and conditions around an agreement in the same way that a traditional contract does, but also provide enforcement of those obligations.

ERC20

A ERC 20 token is a Blockchain-based asset, holding a value, which can be sent and received just like ether, bitcoin, and bitcoin cash. ERC20 tokens are created and hosted on the Ethereum Blockchain. These tokens are based on the ERC20 official protocol, a protocol for proposing improvements to the Ethereum (ETH) network. ERC stands for Ethereum Request for Comment, and 20 is the offer identifier. This is a common standard for creating tokens on the Ethereum blockchain.

NFT's

A non-fungible token (NFT) is a unique digital asset which represents ownership of real-world items like art, video clips, music, real estate and more. NFTs use the same blockchain technology that powers cryptocurrencies, but they're not a currency.

As digitization takes over the world, there's a need to replicate the properties of physical items like scarcity, uniqueness, and proof of ownership in the digital world. On other hand, Digital items often only work in the context of their product. For example you can't re-sell an iTunes mp3 you've purchased, or you can't exchange one company's loyalty points for another platform's credit even if there's a market for it.

With physical assets like paintings, sculptures, photographs, books specialists determine whether something is original, appraising them as worthy to be bought as unique assets. With NFTs, all of that is handled automatically by smart contracts contained within a Blockchain. Smart contracts mint a piece of media known as Non-Fungible Token(NFT). Once an NFT is minted, it becomes a part of blockchain, a digital asset with its ownership uniquely identifiable and traceable. This means that digital media is reborn and begins its journey on a Blockchain, a decentralized digital ledger that is incorruptible, unfalsifiable, and indestructible.

The most used token standards are ERC 721 and ERC 1155. Touted as the next generation multi-token standard, ERC-1155 can use a single contract to make various types of NFTs.

DAO's

DAOs are an effective and safe way to work with like-minded people around the globe. A DAO is like an internet-native business that's owned and managed collectively by its members. DAOs have built-in treasuries that no one has the authority to access without the approval of the group. To ensure everyone in the organization has a voice, decisions are governed by proposals and voting. There's no CEO who can authorise spending based on their own whims and no chance of a dodgy CFO manipulating the books. The rules around spending are baked into the DAO via its code, keeping everything transparent.

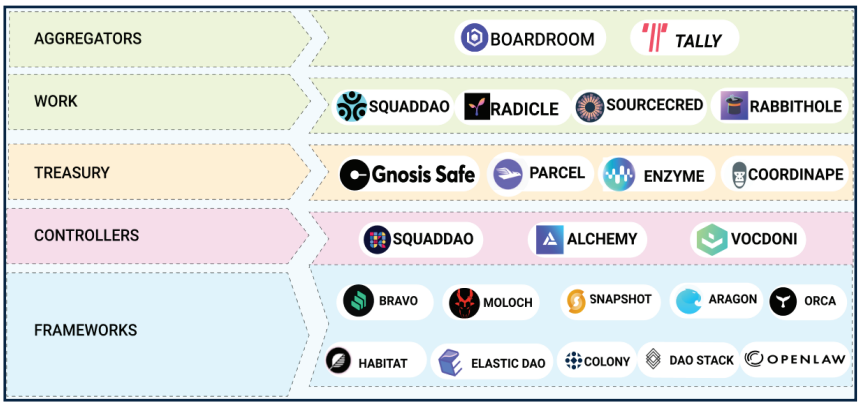
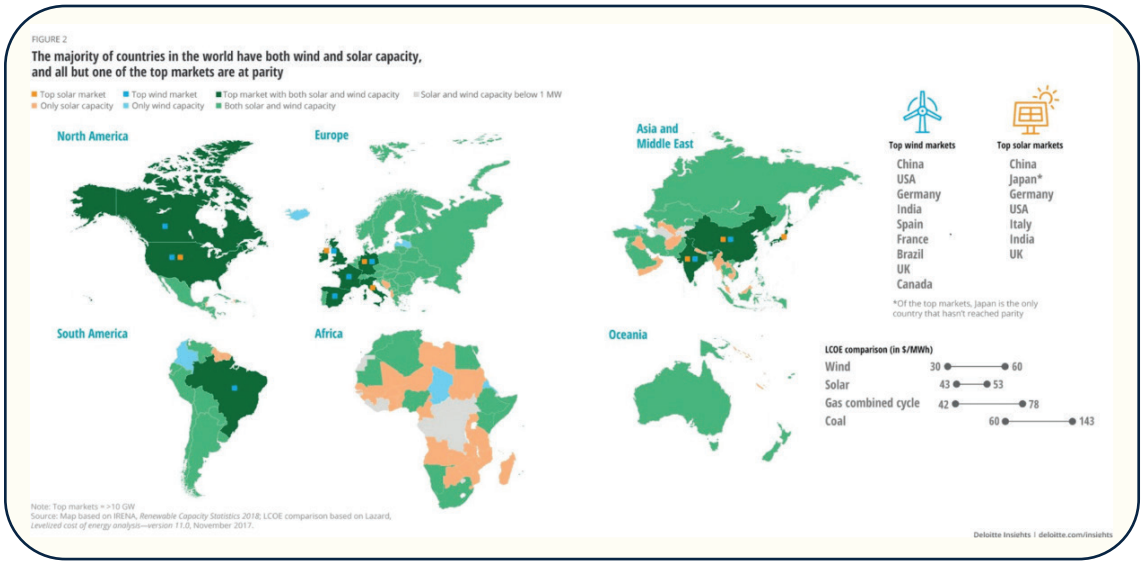


Fig.20

The backbone of a DAO is its smart contract. The contract defines the rules of the organisation and holds the group's treasury. Once the contract is live, no one can change the rules except by a vote. This is possible because smart contracts are tamper-proof once they go live on the blockchains. You cannot just edit the DAOs rules without people noticing because everything is public. If anyone tries to do something that's not covered by the rules and logic in the code, it will fail. And because the treasury is defined by the smart contract too that means no one can spend the money without the group's approval either. This means that DAOs don't need a central

9. Roadmap

As can be seen from the example below, there are a vast number of countries that have an abundance of renewable energy potential and can increase their current production levels. However, until a platform is provided for free sale and purchase of this power among consumers and suppliers, further growth in this sector is muted.



RICHMINT's Decentralized RE PPA trading platform is planned to be launched globally starting with countries with high RE generation and demand.

Anticipating the start of 2022, RICHMINT will focus on launching the first renewable energy marketplace.

The next step will be to validate other key markets – which already have interest coming in from Europe, Australia, Asia, and North America. RICHMINT has an ambitious roadmap that it is developing together with its growing network of industry partners in target markets.

RICHMINT will continue its journey to achieve the goal of becoming the next generation virtual utility, enabling the transition from corporate renewable PPAs to sustainable energy.

The platform will later be expanded to enable other related financial settlement services such as smart contracts on transactions of agricultural commodities between buyers (food processing industries), sellers (farmers), pharma industry, health care and may other ESG applications avoiding direct middlemen and brokers.


2012
Entered RE & Sustainable Market
PPAs signed
2019
2020
Market Research on Blockchain platform
Research and study on use cases for Smart Contracts
May 2021
July 2021
Designing of Blockchain Based solutions for ESG Compliance
Whitepaper conceptualization
September 2021
October 2021
Use cases definition for Health care, Energy, Agriculture and Govt.
Pree Seed
January 2022
February 2022
Seed & Private R1 Test Net
Private R2, NFT Market Place
March 2022
April 2022
Main Net, IDO
IDO on 3 Exchanges
May 2022
June 2022
RICHMINT Exchange Launch
Protocol-DAO, Stable Coin
October 2022
February 2023
Blockchain Launch

Fig.21

10. Team

RICHMINT's team is made up of passionate individuals with extensive experience in sustainability, renewable energy, finance and digital transformation, who believe that technology and thoughtful system design will help to solve the world's most pressing challenges. Meet the team involved in crafting the vision of Decentralized Renewable Energy trade and the future of sustainable investments under ESG Framework.

Sitapathy Chavali
Chief Executive Officer (CEO)

Over 32 years experience in seniour rolls in Business & Technology Development across Telecom, IT, Power, and recently into new frontiers of business including EV Charging & Blockchain based Businesses.

Prince Singh
Director,Marketing

More than 20 years experience is various business sectors including Digital Assets, Banking, Infrastructure, Agriculture and Food Processing.

Richard Stone
Global Business Advisor

International Business in over 43 Countries and growing. Expertise in Waste to Energy Projects, Environmental Friendly Power Plant Projects with Finance Partners providing Equity Funding and Project Finance.

Gabriela Unice
Director, Finance

Abhishek Chavali

Blockchain Strategist

Driven towards planning and implementing sound medium-to-long term sustainable business strategies across industries, to unravel the full potential of block revolution and the indisputable impact it brings.

Nandni Reddy Mali

Marketing Head

16 years of experience in Marketing in Hardware Industry, Banking, Social Media and Digital Marketing. Business Consulting and Financial advisor in insurance sector.

Garima Singh

Consultant Global Marketing

12+ years of experience in Crypto Domain, worked with many Blockchain Utility platforms, ICO, STO, IEO, CEX and DEX exchanges in past few years.

Sahil Verma

Legal Counsel

Sahil Verma is an international lawyer specialising in business law, investment law,international law and dispute resolution. Having worked with start-ups for over 10 years,

Isabel Jimenez

Advisor - Cyber and Data Security

SMore than 11 years of experience in healthcare,expert in Quality assurance testing,working on EHRM (Electronic Health Record Medical) and CMISM (Content Management Information System Medical) for Sandiago HealthCare.

Babulal Saini

Senior Blockchain Developer

More than 10 years exp in IT Systems and Blockchain platform development.

Legal Disclaimer

General Information

The RICHMINT Token (RMW) does not have the legal qualification of a security, since it does not give any rights to dividends or interests. The sale of RICHMINT Token (RMW) is final and non-refundable. RICHMINT Tokens (RMW, RIT, RSEC) are not shared and do not give any right to participate in the general meeting of Richmint.

RICHMINT Token (RMW) cannot have a performance or a particular value outside the RICHMINT Platform. RICHMINT Token (RMW) shall therefore not be used or purchased for speculative or investment purposes.

The purchaser of RICHMINT Token (RMW) is aware that national securities laws, which ensure that investors are sold investments that include all the proper disclosures and are subject to regulatory scrutiny for the investors' protection, are not applicable.

Anyone purchasing RICHMINT Token (RMW) expressly acknowledges and represents that she/he has carefully reviewed this white paper and fully understands the risks, costs, and benefits associated with the purchase of RICHMINT.

Knowledge required

The purchaser of RICHMINT Token (RMW) undertakes that she/he understands and has significant experience of cryptocurrencies, blockchain systems, and services and that she/he fully understands the risks associated with the crowd sale as well as the mechanism related to the use of cryptocurrencies (incl. storage).

RICHMINT shall not be responsible for any loss of RICHMINT Token (RMW) or situations making it impossible to access RICHMINT Token (RMW), which may result from any actions or omissions of the user or any person undertaking to acquire RICHMINT Token (RMW), as well as in case of hacker attacks.

Risks

Acquiring RICHMINT Token (RMW) and storing them involves various risks, in particular the risk that RICHMINT Token (RMW) may not be able to launch its operations and develop its blockchain and provide the services promised. Therefore, and prior to acquiring RICHMINT Token (RMW), any user should carefully consider the risks, costs, and benefits of acquiring RICHMINT Token (RMW) in the context of the crowd sale and, if necessary, obtain any independent advice in this regard.

Any interested person who is not in the position to accept or to understand the risks associated with the activity (incl. the risks related to the non-development of the RICHMINT platform) or any other risks as indicated in the Terms & Conditions of the crowd sale should not acquire RICHMINT Token (RMW).

Important disclaimer

This white paper shall not and cannot be considered as an invitation to enter into an investment. It does not constitute or relate in any way nor should it be considered as an offering of securities in any jurisdiction. This white paper does not include or contain any information or indication that might be considered as a recommendation or that might be used as a basis for any investment decision. Richmint Tokens (RMW) are just utility tokens that can be used only on the RICHMINT platform and are not intended to be used as an investment.

The offering of RICHMINT Token (RMW) on a trading platform is done in order to allow the use of the RICHMINT platform and not for speculative purposes. The offering of RICHMINT Token (RMW) on a trading platform does not change the legal qualification of the token, which remains a simple means for the use of the RICHMINT platform and is not a security.

RICHMINT Token (RMW) is not to be considered as an advisor in any legal, tax, or financial matters. Any information in the white paper is provided for general information purposes only and RICHMINT Token (RMW) does not provide any warranty as to the accuracy and completeness of this information.

RICHMINT Token (RMW) is not a financial intermediary according to Cryptocurrency law and is not required to obtain any authorization for Anti Money Laundering purposes. Acquiring RICHMINT Token (RMW) shall not grant any right or influence over RICHMINT Token organization and governance to the Purchasers.

Regulatory authorities are carefully scrutinizing businesses and operations associated with cryptocurrencies in the world. In that respect, regulatory measures, investigations, or actions may impact the RICHMINT Token (RMW) business and even limit or prevent it from developing its operations in the future.

Any person undertaking to acquire RICHMINT Token (RMW) must be aware of the RICHMINT Token business model, the white paper or terms and conditions may change or need to be modified because of new regulatory and compliance requirements from any applicable laws in any jurisdiction. In such a case, purchasers and anyone undertaking to acquire RICHMINT Token acknowledge and understand that neither RICHMINT Token (RMW) nor any of its affiliates shall be held liable for any direct or indirect loss or damage caused by such changes.

RICHMINT will do its utmost to launch its operations and develop the RICHMINT Token platform. Anyone undertaking to acquire RICHMINT Token (RMW) acknowledges and understands that RICHMINT Token (RMW) does not provide any guarantee that it will manage to achieve it. They acknowledge and understand therefore that RICHMINT (incl. its bodies and employees) assumes no liability or responsibility for any loss or damage that would result from or relate to the incapacity to use RICHMINT Token (RMW) , except in case of intentional misconduct or gross negligence.

Representation and warranties

By participating in the crowd sale, the purchaser agrees to the above and in particular, they represent and warrant that they:

- have read carefully the terms and conditions attached to the white paper; agree to their full contents and accept to be legally bound by them;
- are authorized and have full power to purchase RICHMINT e-token according to the laws that apply in their jurisdiction of domicile.
- are neither a US citizen nor resident.
- live in a jurisdiction that allows RICHMINT to sell RICHMINT Tokens through a crowd sale without requiring any local authorization.
- are familiar with all related regulations in the specific jurisdiction in which they are based and that purchasing cryptographic token in that jurisdiction is not prohibited, restricted or subject to additional conditions of any kind.
- will not use the crowd sale for any illegal activity, including but not limited to money laundering and the financing of terrorism.
- have sufficient knowledge about the nature of the cryptographic token and have significant experience with, and functional understanding of, the usage and intricacies of dealing with cryptographic token and currencies and Blockchain-based systems and services.

- purchase RICHMINT Token because they wish to have access to the RICHMINT Token platform.
- are not purchasing RICHMINT Token for the purpose of speculative investment or usage.

Governing law and arbitration

Any dispute or controversy arising from or under the crowd sale shall be resolved by arbitration in accordance with the Estonia Rules of International Arbitration of the Estonia Chamber of Commerce in force on the date when the Notice of Arbitration is submitted in accordance with these Rules. The arbitration panel shall consist of one arbitrator only. The seat of the arbitration shall be Lugano, Estonia. The arbitral proceedings shall be conducted in English.

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THANK YOU

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