



**UNIVERSAL CRYPTOCURRENCY BASED ON
ETHEREUM FOR TRAVELERS IN THE WORLD**

Version: 1.0.

Last Updated: 14 / 06 / 2018

EBCoin Team

www.ebcoin.io



EBCOIN



Table of Contents

Abstract	4
1. Introduction	6
1.1. Background	6
1.2. Vision	12
2. Market	14
2.1. Primary Market: Tax Refund	14
2.2. Foreign Exchange	17
3. Cryptocurrency	19
3.1. Coin Design for Tax Refund	19
3.2. EBCoin (Eximbay Coin)	20
4. Services	28
4.1. EBCoin Wallet	28
4.2. Kiosk and ATM	32
5. EBCoin Roadmaps	33
5.1. Direction of Business Model and Marketing	33
5.2. Business Development and Release Roadmap	33
5.3. Token Sale and Use of the Proceeds	35
6. EBCoin Team	38
Bibliography	48
Other Links	48
Contact Support	48

Abstract

The EBCoin ecosystem will revolutionize the duty free/tourism tax refund market, currently estimated to be valued at \$60 billion a year. EBCoin will function as an ERC20 token, standardized on the Ethereum blockchain and will be complemented by a complete eWallet solution. By using the EBCoin platform, consumers will receive their refunds instantly and can use the proceeds as a digital currency. With EBCoin, tax refunds will be transparent, resulting in greater efficiencies for tax authorities. For retailers, EBCoin will significantly reduce the high costs associated with the inefficient systems presently being used. It will also help promote higher spending by tourists at participating duty-free retailers, where consumers will be able to present payment using their EBCoin wallet as an optional payment method.

Our research has shown that up to \$24 billion in sales tax refunds are unclaimed by travelers. This is due to inefficiencies in the current systems, such as paper based processes associated with collecting tax refunds at points of departure. In addition, the industry currently charges merchants processing fees of up to 30% on the tax refund amount. This limits the effective use of sales tax refunds as an incentive to expand the shopping habits of tourists at their travel destinations.

The EBCoin ecosystem consists of: consumer interfaces in the form of a mobile wallet application, the EBCoin token as a new digital currency, ATM kiosks in global airports, and merchant interfaces for accepting payments and participating in loyalty programs. The EBCoin token will act as a method for accepting payments by participating retailers, as well as having the capacity to process loyalty benefit program transactions. In turn, the ATM kiosks will support instant conversion to fiat or other cryptocurrencies.

The EBCoin project is backed by KR Partners Co. Ltd (KRP), a Korean based payment services provider established in 2006, specializing in tourism, travel and duty-free industries. KRP now has over 6,000 online and offline merchants in South Korea, China, Japan and Southeast Asia. Clients include airlines, duty-free shops, department stores and hotels. EBCoin has an international Board of Advisors, with deep domain experience in digital payments, financial technology services, tax refunds and monetary systems.

Phase One of the EBCoin go-to-market strategy is to target the tourism corridors between China and South Korea, as well as Japan and South Korea. In addition, EBCoin will also focus on key tourism corridors for Chinese, Korean and Japanese tourists in Southeast Asia. Phase Two will expand to target other key Asian tourist corridors, including Europe and Australia. Further, we have also identified that there are tremendous opportunities in other duty-free hubs, such as Dubai and Abu Dhabi. These and others will be included in future phases of our project development.

EBCoin Foundation Pte. Ltd is a registered company in Singapore. We are advised by RHTLaw Taylor Wessing LLP, a global legal and advisory firm with representation across 41 offices in Asia, the Middle East, Europe and the United States via the Taylor Wessing network and ASEAM Plus Group.

Terms of Token Sale

EBCoin has allocated 750,000,000 EBC tokens to participants via a series of token sale events. This represents 50% of the total supply of 1,500,000,000 EBC.

During the two pre-sale periods, 20% of the token sale allotment will be made available for a total of 150,000,000 EBC. A further 80% of the token sale allotment will be available for the main token sale event, 600,000,000 EBC in total.

Unsold tokens from Crowd sale will be burned and tokens purchased during our token sales will be unlocked before listing on exchanges.

With 80% of the proceeds to be reserved for product development and the remainder allocated for sales, marketing and reserve.

The Use of Proceeds	Proportion
Product Development	80%
Marketing	10%
Sales	5%
Reserve	5%

EBCoin will utilize third party auditing and accounting services for transparency and governance, and is compliant with all laws and regulations of Singapore.

1. Introduction

1.1. Background

Development of World Tourism Industry and Chinese Contributions

The global tourism industry has grown steadily over the past decade. This can be measured by the number of overseas travelers worldwide. The travelers surpassed a billion for the first time in 2012, it increased by 19% to 1.25 billion in 2016. Even though, there was a slight decrease (A 4% decline from the previous year) in 2009 due to global economic recession, but after all year shows a significant increase. According to The United Nations World Tourism Organization analyzed that China (122 million, 2016), the United States, Germany and United Kingdom are the middle of cause of traveler increase. Not only are the number of travelers, each country's overseas spending on travel the top-ranked in the world. Amongst of them, the country with the highest expenditure on overseas tourism is China (\$26 billion), which has grown as a big player. The statistics in China are tantamount to the total expenditure on overseas of other nations, the United States, Germany and United Kingdom. As can be seen in the several latest reports, Chinese is dominating large sections of the consumption market in the world.

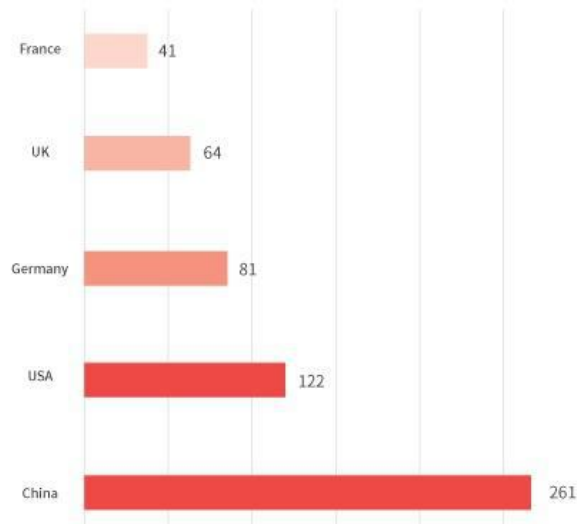
[2007~2016 Outbound Tourists Worldwide]

Year	Number of Tourists
2016	1.235
2015	1.184
2014	1.134
2013	1.088
2012	1.040
2011	1.994
2010	0.950
2009	0.892
2008	0.928
2007	0.911

(Unit: 1 billion)

(Data: World Bank, 2016)

[World's Top Tourism Spenders]



(Unit: \$ 1 billion)

(Data: UNWTO, 2017)

Regardless of the region and country, tourism industry is rapidly developing at the present day. International tourism is a large part in terms of export earnings of the world after fuel and chemicals. Unlike other sectors, the tourism industry does not require high technology or specialty. With resources and utilizing environment, each country can create competitive advantage and differentiated value in comparison to other nations. Travel & Tourism Competitiveness Index in 2017 (World Economic Forum, 2017) shows that those components are an important measure for improving tourism. Exactly 59 countries in America, Africa, Asia and the Middle East have included from the top 100 list according to the report. Consequently, tourism industry has something special that can be activated irrespective of economic power, GDP and geographical conditions. These days, a numerous of people are expecting unusual experiences and new challenges, so there is a lot of potential and vision in tourism industry.

The Status of Payment Industry in the International Tourism Market Ecosystem

As mentioned earlier, the tourism industry is developing all over the world, and the increase in the number of overseas tourists is leading to consumption. As a result, each country enjoys economic ripple effects.

Travelers exchange or withdraw their local currency for consumption and purchase locally, and they buy items using the local currency or credit card. According to the tax refund system in each country, the consumption tax is received in local currency or remitted to the home country after returning home. The rest of local currency will be exchanged at the bank of their home country or the airport before departure.

At this point, exchange of money between the local currency and the destination currency occurred. Regardless of whether it is through commodity money or electronic settlement, payment should be paid for it.

Many businesses are thriving in response to the currency demand of travelers. Foreign exchange operators operate currency exchange counters at airports, downtown areas and hotels where travelers frequently visit places, and they collect fees of around 3% as the fee for exchange.

Credit card companies provide local payment through VISA network. At this moment, they generate additional revenues of approximately 3% from the payment amount. In addition to this, they gain a 3% of exchange fee when customers withdraw cash using ATM.

Most countries are operating a tax refund system that allows overseas travelers to reimburse their domestic consumption tax, which amounts to 8-25% of the purchase price. Taxes refunded after shopping are either received in local currency or remitted to their account. This allows the tax refund companies take 20~30% of commission as a revenue.

It is apparent that financial commissions such as overseas service fees are set higher than general transactions for travelers. That is because of the admission fee in an airport duty free shop, which is the same with regard visitors as transient guests to make excessive profits.

Status and Problems of Tax Refund System

Tax refund means when a tourist buys a VAT inclusive product during their travel period, and returns to his or her home without using it, they can get a certain amount of VAT from their purchased products.

Currently, 34 countries are operating the regime, tax refund and among them, 28 nations are belonging to the European Region. These include the United Kingdom, France and Italy, all of which are the top of rank of tourism competitiveness index.

[Tax Refund System in Major European Countries]

Nation	Surtax Rate(%)	Minimum Purchase Mount	Maximum Refund Amount	Receipt	Customs Seal Validity Period	Validity Period of Refund Certificate	
UK	70	30 GBP	500 GBP	Necessary	3months	No limitation	
France	19.6	175 EUR	500 GBP			Unnecessary	6 months
Germany	19	25 EUR					4 years
Italy	20	154.94 EUR		2 months			
Greece	23	117.39 EUR		4 months			
Spain	18	90.15 EUR		3 years			
Netherlands	19	137 EUR		No limitation			
Denmark	25	300 DKK		5,000 DKK	Necessary		30days
Switzerland	8	300 CHF	90days			150 days	
Hungary	25	740 HRK					

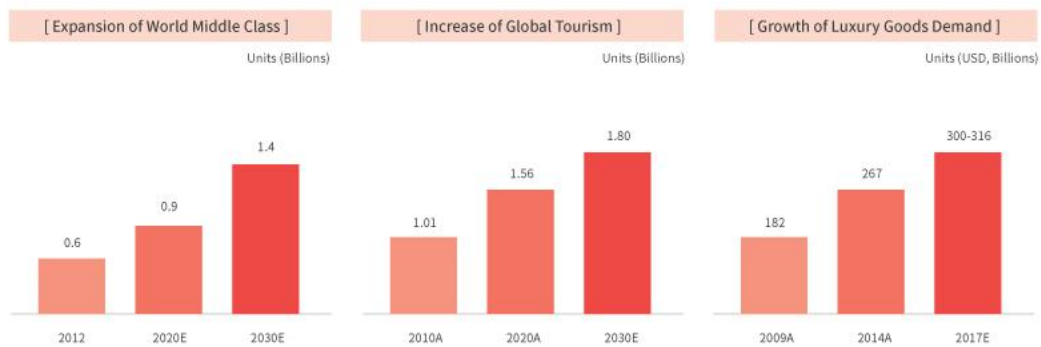
(Data: Each Country)

When purchasing goods, customers can get back the domestic tax not only in an airport or specific area in the city but any shop in a local country. Thus, the tax refund system is a necessary system for attracting tourists and increasing tourist consumption.

On this account, the number of Chinese tourists has exploded and the tourist markets of Asian nations have also grown. These countries have been busy introducing a tax refund system.

There is a big difference in the refund rate because the system of taxation in each country is dissimilar. In Europe, more than 20% of the surtax is applied in particular and there are many expensive luxury goods, so the tax refund is very effective.

The size of the market for tax refund is forming a potential market of 60 billion USD (50 billion EUR) and growing by 25% each year.



▲ Increase in tourism and luxury consumption due to emerging global consumers

- Asian middle class has grown sevenfold since the year of 2000; the number of millionaires in China are expected to double between 2014-19 to 2.3 million.

- The average growth rate of Chinese tourists for tax free shopping in Europe is 16-20% per year, and the rate of growth between 2009-14 and 2014-19 is expected to be 9-12% each year.

▲ The global tourism market is supported by increased affordability and expenditure per tourist, particularly spending on luxury goods

- Over the past sixty years, tourism has undergone continuous expansion and diversification to become one of the largest economic sectors across the world.

- Some travel disruptions, such as 9/11, SARS, ash cloud and global financial crisis transpired but there was only minimal disruption and which made a quick recovery.

▲ Demand for global luxury goods continues to rise, driven by the spread of the middle class and the polarization of prices.

▲ VAT contributes greatly to government budgets and more countries adopt VAT as a revenue raising countermeasure.

The problem is that the procedure is complicated and cumbersome, which is causing great inconvenience to travelers, even though the effect and demand for the refund are significant.

Especially in the travel season, when the demand for tourism is greatly increased, travelers must wait a long time for customs checks and refund requests owing to the large crowds in airports for departure. This brings on the pernicious effect in terms of the quality of travel.

Due to this inconvenience, it is known that only less than 40% of the VAT included in the refund will be refunded to consumers.



In addition, the existing tax refund system is full of absurdity.

▲ Consumer discomfort from multiple stages of refund process

- Consumers must keep the purchase receipt at departure.
- The customs officer must confirm that the consumers' goods are carrying out at the customs counter of the departure lounge.
- Refund application (including refund method registration) must be completed at the refund counter.
- If consumers do not accept it in cash, it may take up to three months to send it to their account.
- 100% refund is impossible (30% is paid as refund service fee)

▲ Excessive costs for system operation

- Private refunding operators take over the operation of computerization and settlement services for tax refund between merchants and the National Tax Administration.
- Pay a very large rent to the departure lounge to manage a refund window. Due to limited opportunity to enter the airport for opening a business, a big portion of the business cost is paid as the rent for operating the refund window through competition amongst refunding companies.
- Originally, tax refund aims tourism activation. However, a refund provider takes 30% of them as the fee, which system goes against the original intent.
- The tax authorities have no way of confirming to tourists that they have finally received a tax refund. If they audit this, it could cost a bundle of money.

▲ Criminal Behavior

- Due to the competition between tax refund providers, a large part of the refund fee is returned to the merchants as the support fund for their marketing.
- If the merchants do not return some of the tax exempted by the government to increase sales to secure additional profit, it may be regarded as a criminal act and they can be charged with tax evasion.
- It is known that some tax refund companies do not send the tax refund amount to their customers on purpose.



1.2. Vision

We have devised a cryptocurrency that will replace the demand for the local currency used by global travelers.

Global travelers are dramatically increasing year by year, and the biggest contributor is Chinese amongst of them.

It is well known that most Chinese tourists travel as group tours and they spend a lot of money on shopping during the trip.

The top ten countries visited by Chinese travelers are all in Asia.

First of all, we plan to set up ATMs for currency exchange at each airport in Hong Kong, Japan, South Korea and Thailand. Afterwards, we will provide payment and tax refund services to numerous number of shopping centers, duty free shops and department stores.

Travelers will benefit from our cryptocurrency at merchants, travel agencies, airlines, airports and duty-free shops under the supervision of KRP and GCMC. To use the cryptocurrency, they will install our EBC wallet on their mobile phone.

Travelers receive drawback in EBCoin using our EBC Wallet and they receive shipping document confirmation at an ATM in airports. At an ATM, the rest of money is exchanged in EBCoin.

EBCoin stored in the EBC Wallet can be exchanged in the EBC exchange at anytime, anywhere and around departure.

Travelers can solve problems of many discomforts. Unnecessary procedures, such as having a receipt and long wait times at a refund window will disappear without a trace. Because there is no need to go through bank windows in airports to exchange their rest of the money. As a result, the quality of travel will be vastly improved. 100% of the tax can be refunded immediately after confirmation of export, because both tax refund companies and rent for airport windows are unnecessary. The exchange fee is also exchanged using the cryptocurrency exchange on the online, so it can be used at a much lower cost than the currency exchange in airports.

The tax authorities in the countries that operate a tax refund system can enhance the transparency of the system. There is no cost to manage the system and no need to audit whether the tax is properly refunded.

Finally, it is possible to maximize the effect of attracting tourists by increasing the tax exemption benefits for the domestic visitors and improving their convenience. As global travelers use the tax

refund service via EBCoin, it is not difficult to expand the scope for use of EBCoin in many ways, such as currency exchange and payment.

VISA is the payment method that handles the most cross border payment worldwide.

2015 Amount of VISA for Foreigners in Asian Countries

Nation	Amount
Vietnam	\$1.3B
Thailand	\$5.7B
Indonesia	\$1.7B
Japan	\$5.9B
China	\$7.1B
South Korea	\$2.5B

With the annual tax refund market worth approximately \$60B, and the X-border payment market grossing hundreds of billions of dollars every year, global tourists will be using EBCoin as their main currency.

2. Market

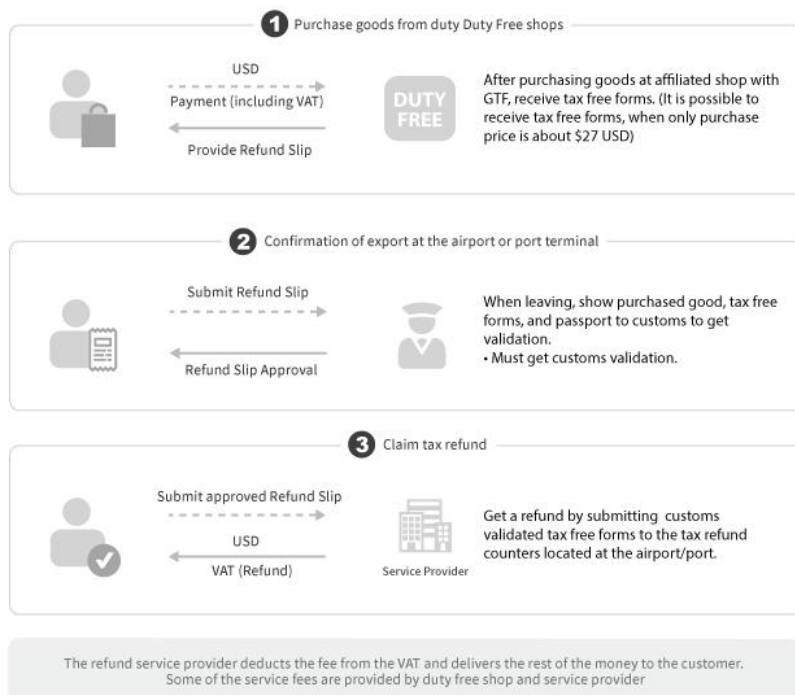
2.1. Primary Market: Tax Refund

The tax Refund market is shaping the worldwide tourist market. It is a merit that this service for travelers to be able to receive a refund of the consumption tax (15%). Especially in the European region as a huge tourism market where the demand for luxury products is high. Recently, the rapid growth of Chinese tourists has led to development in Asian tourism markets, including South Korea, Japan and Thailand.

In order to receive the Tax Refund, every traveler must obtain a tax-free goods purchase history and take confirmation of export at the customs authorities. To do this, the integrated computer system will be integrated to provide confirmation of the recipient who receive refund and ex-post settling up service after integrating data from taxpayer (Merchant), the National Tax Administration and customs.

Tax Refund, based on cryptocurrency

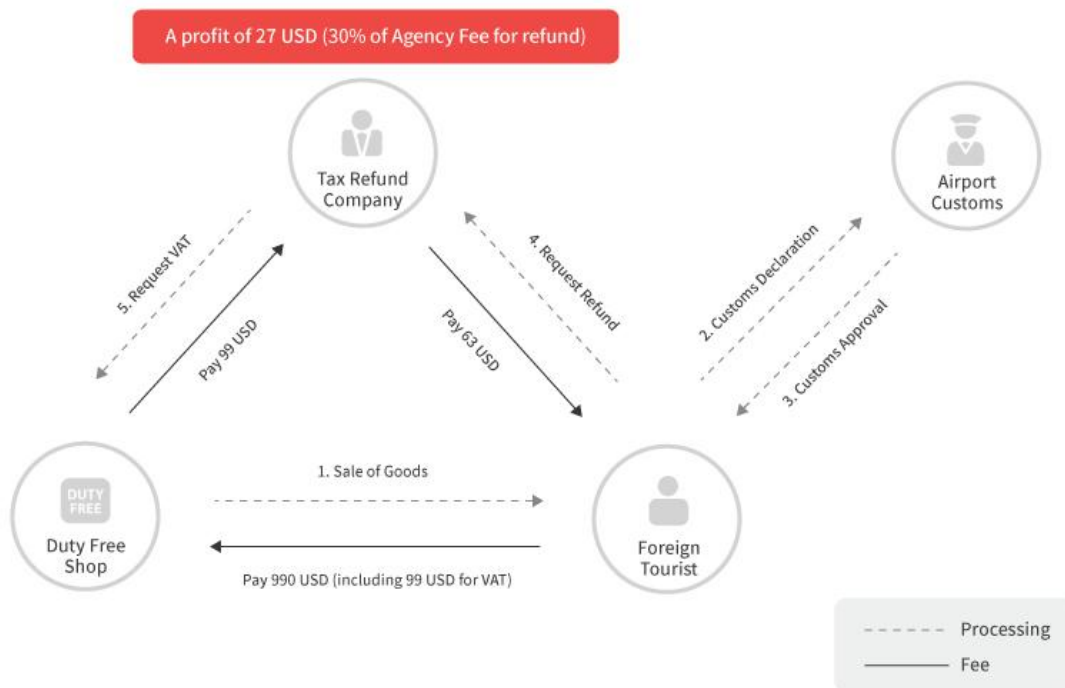
Tax refund is a system that allows foreign tourists to receive the domestic indirect tax (VAT, special consumption tax) only when the foreign tourists take out their goods purchased at the place designated by the superintendent of a tax office in order to attract and secure foreign tourists.



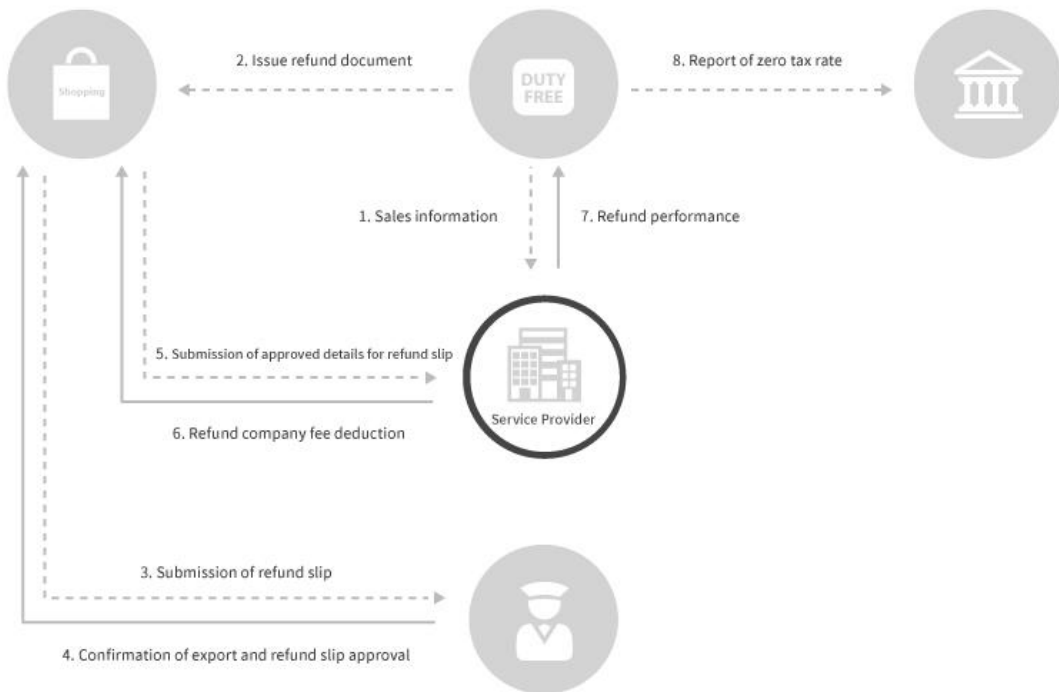
The domestic tax refund is aimed at attracting foreign tourists. However, the procedure is complicated and many people want to get a refund. But the problem is they cannot afford to wait for a longer time to access this benefit before leaving the airport. For these reasons, travelers tend to give up on refund tax. Also, the guidance provided for receiving a refund slip at the duty free shops, which is the first in the refund process is too sloppy or inadequate.

The duty-free shops provide a refund certificate and customer information to the refunding service provider as a tax-refund affiliate. The refunding companies receive the VAT from duty free shops and pay the money to the foreigner, deduct a portion of the fee and share the profit with merchants.

Unlike the purpose of the system, foreign tourists may give up on receiving refund or only receive part of the refund, because of the complicated procedure.



The reason for this can be found in the following structure. When a foreign tourist refund tax through the refund slips approved by the customs office, the refunding company is the nucleus of the service procedure. They handle the business, which is refunding the VAT after deducting the fee, for foreign tourists and duty free shops.



The EBCoin team is concerned about the structure of the actual amount of refund and the unfair fee deductions. We are looking for ways to improve the complex procedures which are unnecessary just like the agency business of tax refund companies. We will do this not only with the blockchain and tokens. We also came up with the concept of a smart contract, which supports the transparent structuring of tax refunds using the decentralized blockchain. The smart contract also includes the exchange of transparent rights and duties. All tax refunds will be carried out under the conditions in the smart contract, and foreign tourists who are due for a refund will be refunded; with the value of the refund provided as a token.

Ultimately, our team decentralizes the existing centralized agency service, and refunds the fee that occurred through the agency to the foreign tourists in full, so as to bring this system back to life. Furthermore, we extend these systems and services to the global tax refund market.

2.2. Foreign Exchange

Usually, foreign tourists exchange their currency to the local currency of the country they intend to travel to before or during departure. Some limitations in transportation of money also require that tourists leave the bulk of their money at home, which increases the risk of loss due to the exchange rate when the exchange is done later.

There are also some inconveniences when exchanging currency, due to the limitations of handling currency and the time it takes to visit the banks.

- ✂ Banknote Exchange: 26 countries are available

- ✂ Coin Exchange: Only 8 countries' currency is acceptable (the US Dollar, Japanese Yen, British Pound, Euro, Swiss Franc, Australian Dollar and Hong Kong Dollar)

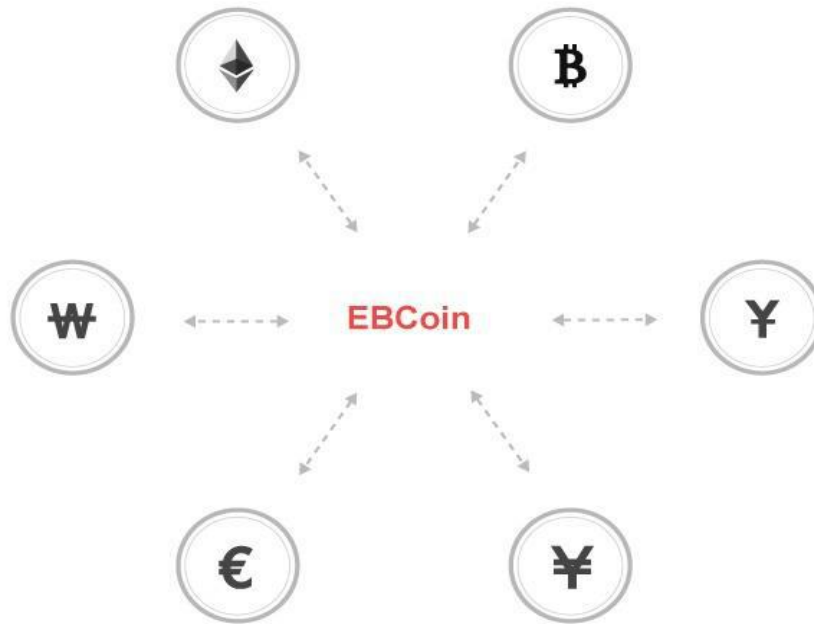
In the case of tax refund, travelers may keep EBCoin if they plan to revisit their travel destination in the nearest future, or they if they choose not to patronize their local merchants due to the exorbitant commission costs. In this case, they will need to simply make exchanges into their local currency through an exchange market or currency exchange.



Currency Exchange Kiosk



With EBCoin, we are trying to deal with difficulties of exchanging money in various countries. If customers want to exchange their own currency before departure, they can simply exchange the money at the KIOSK that is deployed at airports in each country.



It is possible to access kiosks through the EBCoin App. Starting with EBCoin, other primitive currencies, such as Bitcoin and Ethereum; and fiat currencies such as USD, YEN and WON are also available for travelers to exchange and withdraw.

3. Cryptocurrency

The tax refund for foreign tourists depends on the refund service provider. The provider acts as an agency for customs and merchants, and records the purchase history and passport information of the tourists on a centralized server. A portion of the refund will be deducted as a commission fee for foreign tourists in process of payment for refund. There are loss and missing risk in the manual process of collecting paper receipts from merchants and registering them in computerized accounts. The actual payment between the duty free shop and the refund service provider is also uncertain.

In the case of refund in advance, a credit card number may be stored for rebilling if it does not meet the refund requirement, which has the problems in terms of sensitive and personal information leakage.

Under this circumstance, we tried to solve the above problems by developing refundable coin with characteristics of cryptocurrency.

3.1. Coin Design for Tax Refund

Limit of Bitcoin and Ethereum based ERC-20 Token

There are two ways to develop the coin for a tax refund, which are multi-signature technique of Bitcoin or smart contract of Ethereum.

However, Bitcoin has several problems as follows.

- Small block size
- It takes a long time to confirm
- Fees are expensive
- Turing incomplete script with limited opcode

It is therefore, not suitable for use in refund payments due to the block size and the delay in confirming blocks. No one will wait for ten minutes to buy a cup of coffee. Similarly, when you purchase expensive luxury goods or home appliances online, will you be willing to go through six steps to confirm the purchase? Most people wouldn't.

As a multi-signature technique, Bitcoin protocol enables a low level of 'Smart Contract'. For example, you can create scripts that must be signed from two of the given three private keys to be approved.

These scripts can be useful for business accounts, security and the tax refund, but there are some severe limits:

1. There is no loop command category, such as the words, 'while' or 'for'.
2. UTXO (Unspent Transaction Outputs) script is not good enough to control the amount of withdrawal in detail, because the script restricted in terms of price fluctuations.
3. There are only two situations, which are 'spent' or 'unspent', so it is impossible to create multiple contracts and is used for a one-time contract. Thus, there are limitations in terms of extension and application to develop applications in various fields.

Vitalik Buterin, the founder of Ethereum discovered these limitations of Bitcoin, and then developed the new cryptocurrency we all know as Ethereum. This cryptocurrency can be used in facilitating payments. But not only as a payment method, but also in creating a wide range of DApp (Decentralized Application) and smart contract as an open platform. The Ethereum platform is built with a Turing-complete language (Serpent, Solidity, LLL, Mutal) that is functionally different from Bitcoin.

Blockchain 1.0, which is a simple type like Bitcoin had ended, but the age of Blockchain 2.0 has arrived and is available for actual use, especially in the financial sector. With Ethereum being at the forefront of the revolution, this has opened the pathway to Blockchain 2.0 and we believe this cryptocurrency is an appropriate platform for our token sale. After the token sale events, other new tokens can be listed on cryptocurrency exchanges.

In Ethereum, smart contracts are conditionally coded and propagated to each node. The form is as follows: 'If the foreign tourist meets the refund condition [condition 1], the duty free shop confirms the approval from customs [condition 2] and transfers the token-type refund coin to the traveler's wallet.

The Ethereum is an open platform that is interoperable and linked with decentralized applications based on ERC20 standard protocol. It is not restricted to only one service, but has infinite potentials for creating services.

Our team develops EBC (EBCoin) as an Ethereum based ERC20 token and we provide contract codes for tax refunds in the smart contract using minimal intervention and without any third parties. Our project is based on a DApp and our main targets are foreign tourists, duty free shops and customs.

3.2. EBCoin (Eximbay Coin)

To provide a solution for applying tax refund service on the blockchain is important.

We took a closer look at EBCoin with some problems and their corresponding solutions when we designed the coin.

Our team checked over the necessary parts of Bitcoin and Ethereum’s control algorithm and implementation process for public / private blockchain service for a long time.

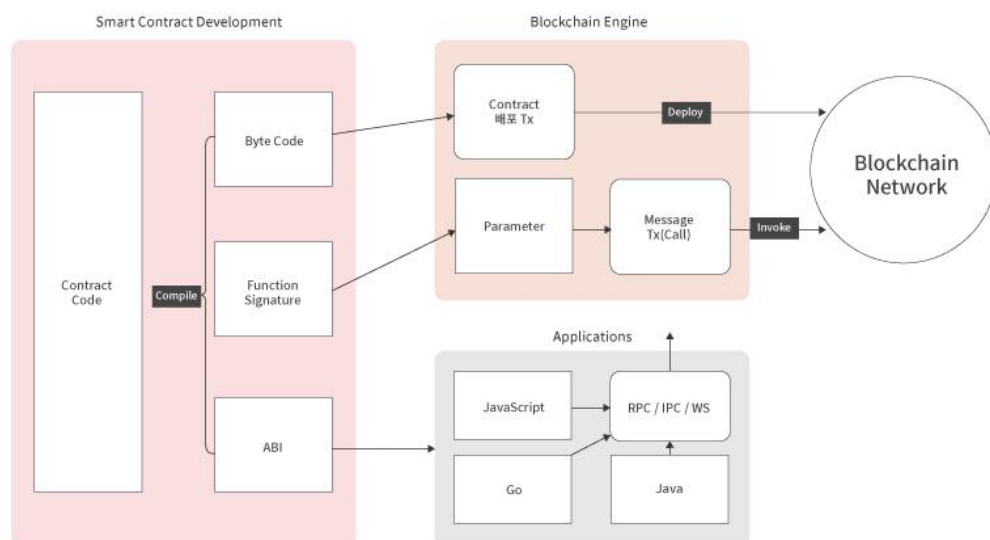
This led to the design of a refund coin, called EBC (Eximbay Coin), which had to be considered for issuance, asset transfer, signature, user behaviors, mining, system configuration, coin management and implementation.

We threw a difficult question to ourselves: Can EBCoin evolve from a simple refund coin to a more extended service?

How should it be handled to apply to the global tax refund market? How should it be implemented to raise consensus among various organizations?

Through countless trials and errors, EBCoin was designed as a smart contract based tax refund service on the Ethereum blockchain. We reached a conclusion on a reasonable basis that the coin must be based on ERC20 Token standard token technology, which is easy to develop, is fast and compatible.

We have decided on the design and construction direction of EBCoin by examining the technical constraints in some reviews and the technical features that we must implement. In consideration of each country’s various refund targets and conditions, we have compiled the code defined in the smart contract script code with a variety of functions. After converting it to a Byte Code, it has become possible to write on the blockchain through a transaction, which was the point of contact as well as the application distribution.



We had one question: How to identify and access smart contracts recorded on the blockchain? We examined the structure of the contract, and when the transaction is recorded on the blockchain, the block is created by the miner. This transaction is processed by the contract creation transaction and returns the contract address of the generated contract in the contract address field of the transaction receipt.

The contract address refers contents of the contract code we have defined. So how do we approach the function of each defined contract code? In other words, how will we carry out the value and refund conditions that foreign tourists receive the refund at duty free shops to return the result?

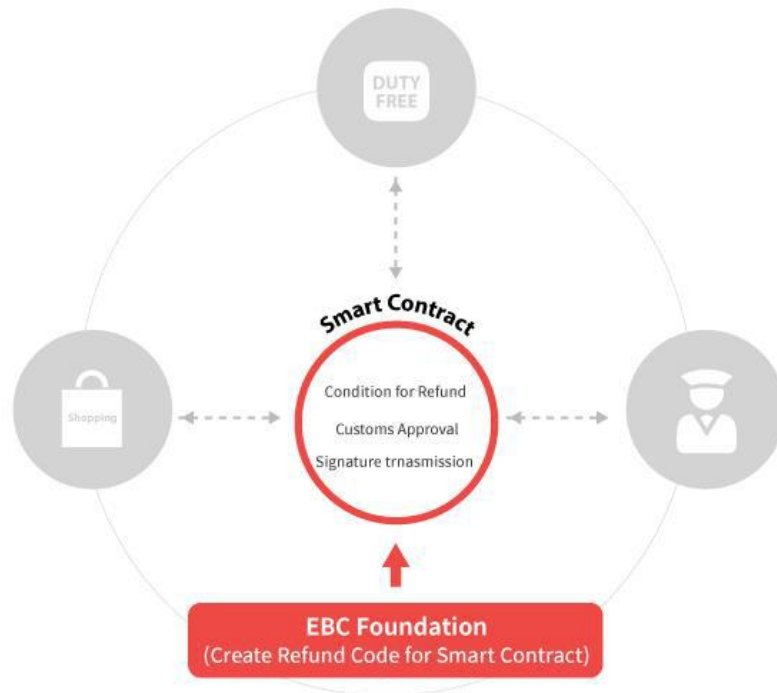
Access to functions can be handled as follows. When the contract function is executed in the function signature area of the contract code, put the contract address in the 'to' part of the transaction and the function address in the 'data' part. It is a necessary procedure to include the parameter values for operation in the payload. The function area will record the conditions for tax refund on each country. The parameters include sales information, sales amount and sales date to judge refund conditions, and the address necessary for the refund. In order to do this, processing for functions must be implemented in advance.

So, how to implement the confirmation of export by customs and refund coin payment authority? How to handle participation of public institutions and each nation's refund system in a smart contract? How to supply initial liquidity coins to duty free shops? What will happen if the duty free shops use the coin for other use other than refund? Is there any way to make the coin unusable?

The contract code can delegate the authority that makes transfers possible and can input the administration authority, such as the transmission range and the control of the supply amount. To create such a function, a central manager of the coin is required. It can be processed with a simple account, and a contract can be issued with a democratic vote to issue a new token. It is also possible to limit the influence of the token owner on each address.

Our team considered that the role of the EBC founder is very important to induce the participation of each country. This process cannot be carried out exclusively, but must be controlled and authorized by each participant's vote.

The EBC Foundation can determine the scope of the signer's authority and procedures for service operations, which is similar to customs or duty free shops. The participant of a specific address who has an authority can use function calls defined in smart contract code, which is available to provide additional liquidity, collect coins from certain participants and obstruct coin usage.



How can participants with different authority access to the smart contract of Ethereum? Also, when users learn about UI / UX, can they make them feel comfortable in comparison to existing applications?

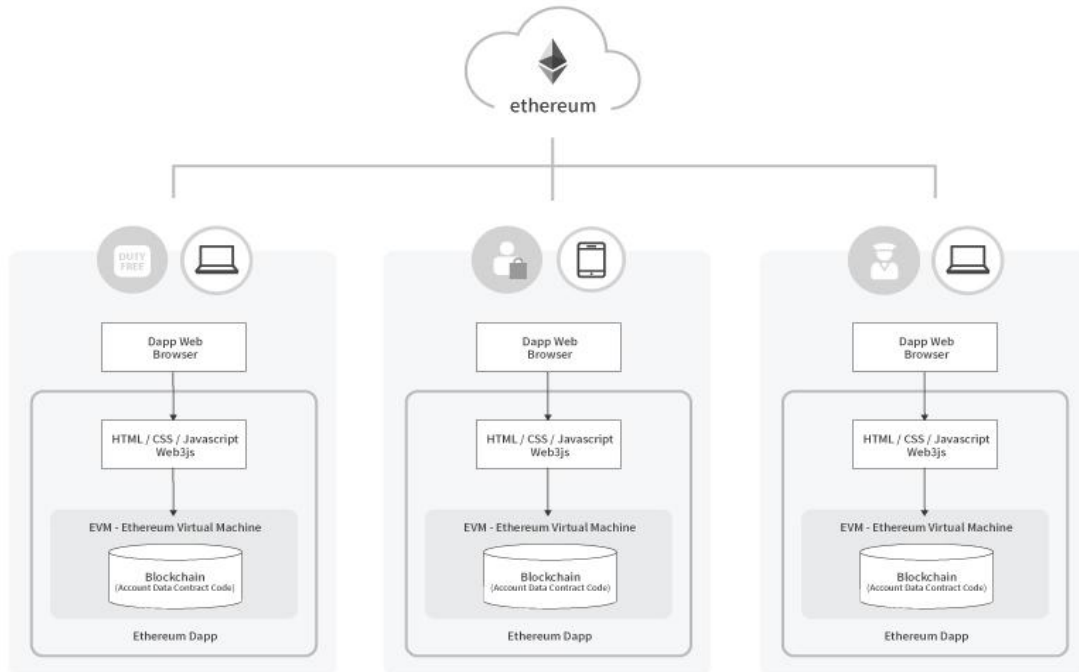
Like Bitcoin, An Ethereum node is needed to access the block. The blockchain engine means the Ethereum node, such as 'geth', 'parity', and 'eth'. Transaction processing or contract execution related to the smart contract is recorded on the blockchain, and a function of the smart contract recorded on the blockchain according to the message TX is called.

If duty free shops, customs and foreigners want to handle their respective duties through web or native applications, the following functions are available.

Through the ABI (Application Binary Interface), we provide the function to access the smart contracts in the application area. We will distribute the dApp based EBCoin APP via this functionality. The EBCoin APP, created by JavaScript or Go and Java will access the blockchain by means of a communication protocol, such as RPC for interaction between users and smart contracts, and will be configured to communicate with the Ethereum node.

As a result, a step-by-step tax refund condition is created by the EBC founder in the smart contract as the EBCoin contract name. Participants such as duty free shops, customs and foreigners are

composed of independent nodes through dApp, and these nodes are connected to each other in multinational on the Ethereum network.



The implementation process is as above.

But lastly, why should a refund be made on the blockchain? What are the benefits?

The transfer of the refund coin is recorded on the open ledger of the blockchain as a transaction history. This ensures that all procedures for tax refunds can be tracked transparently.

In cases where a refund service provider is acting as an intermediary refund tax to foreigners via refund slips, the refund service company and duty free shop obtains and settles the commission. This is limited to foreign tourists whose customs have been properly processed by requesting a refund.

The feature is centralized through the monopoly of a small number of refund service providers, and tourists receive refunds that are deducted from brokerage fee, which is unnecessary in the consignment process.

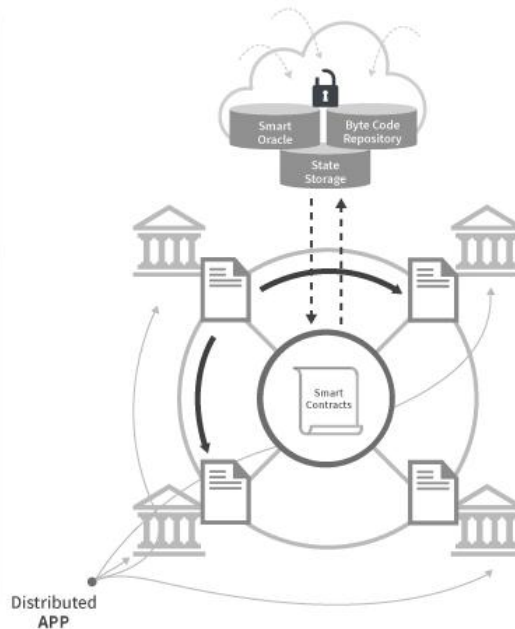
The characteristics that are improved when the service is provided by the blockchain are as follows.

1. Decentralization: Transaction is available between duty free shops and foreign tourists without the third parties, thereby reducing commissions.
2. Security: Hacking is not possible due to the nature of blockchain
3. Anonymity: No additional information appears in addition to the address due to the nature of blockchain
4. Non-repudiation: Foreign tourists can transfer EBCoin as much as the refunded amount to the address that they want to receive and confirm it on blockchain
5. Statelessness: The service can be used in many countries other than specific countries

The contract code of EBCoin for tax refund is recorded on blockchain to operate as follows.

✂ The source code for the contract will be written in solidity and released on the website, github in the future.

Smart Contract Generation	
Blockchain	Basic Data - Contract ID - Item Number - Corporate Registration Number - Amount
Smart Contract	<pre> IF Refund Condition IS TRUE THEN IF Customs Approval status IS TRUE THEN Provide Refund Coin to foreigners ELSE Provide Refund Coin to National Tax Administration ENDIF </pre>



1. Obtain product sales information, including sales amount at a duty free shop and refundable EBCoin address of foreign tourists. Sign up with the private key of the duty free shop for the amount corresponding to the following conditions. Afterwards, EBCoin and goods sales information are recorded in the data area and change the refund slip status to completion.

- Primary condition: Refund possibility (ex: If the total amount exceeds 26.95 USD, export the purchased item within 3 months by Korean standards)

2. The customs office confirms the EBCoin refund address of foreign tourists, and determine whether the goods are approved for export as they confirm the recipient for refund, item, period and other conditions.

- Passport of foreign tourists, refund slips are can be maintained in the EBCoin App, which is encrypted.

3. Sign the export using the customs private key.

4. EBCoin will be transferred to the refund address of foreign tourists. After that, the refund status changed into completion status.

As an additional exception, if the duty free shops do not pay the refund amount by the due date specified in the smart contract, it is impossible to check the related information on the ledger. Foreign tourists can request their refund on the basis of this, and customs will execute the following terms and conditions after confirming whether the goods can be exported according to the refund conditions in the smart contract.

How will coins that are refunded by foreign tourists be used?

The EBCoin is developed according to standards and can be partly transferred to others. A tax refund service is made available on the system and users can sell the coin through exchanges, exchange value with other tokens and carry out P2P transactions. Foreign tourists can exchange EBCoin at ATMs and currency exchanges in their own country or at the airport. They can also spend money at EBCoin affiliated merchants.

We provide the functions of a multinational tax refund and facilitate payments, settlements and exchanges as an intermediary using EBCoin on the blockchain. With our system, there will be no intermediaries such as existing refund service providers, payment gateway companies and banks. Services for travelers' tax refund, currency exchange and payment will be built into a decentralized application in the form of an electronic wallet platform.

Customs and duty free shops will also participate in each node and maintain consistency as they continuously keep each of the same data while staying in sync. Every account managed by customs and duty free shops will be controlled by a private key, with the state of the contract accounts which is controlled by codes being changed through the transaction.

The EBCoin which is designed with this process has the following advantages for tax refund.

- Operate transparently and easily change the regulations according to the refund system
- Improved security
- Privacy protection
- Global serviceability

- Eliminate monopoly in terms of services and profits

In addition to preventing forgery and falsification due to the loss of the actual slip, it is convenient to report the zero tax rate from duty free shops and they can efficiently manage documentary evidences. Furthermore, tasks of customs are simplified, efficiency also improved and the time customers waited for services is shortened simultaneously.

We have been providing several services, such as online/offline payments and dynamic currency conversion based on credit card to foreign customers for more than 10 years. One of our important services is the payment service based on messenger, application and barcode.

Through Bitcoin, the blockchain became well-known throughout the world and there's been a growing interest in the value of the blockchain. We will use EBCoin as the right medium to create points with our merchants through the tax refund market, payment service and currency exchange.

4. Services

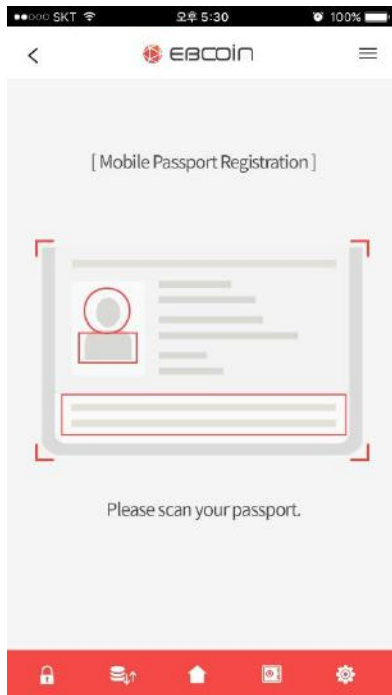
4.1. EBCoin Wallet

To make EBCoin’s tax refund, payment and currency exchange functions easier, we will create and distribute the EBCoin wallet in the form of an e-wallet.

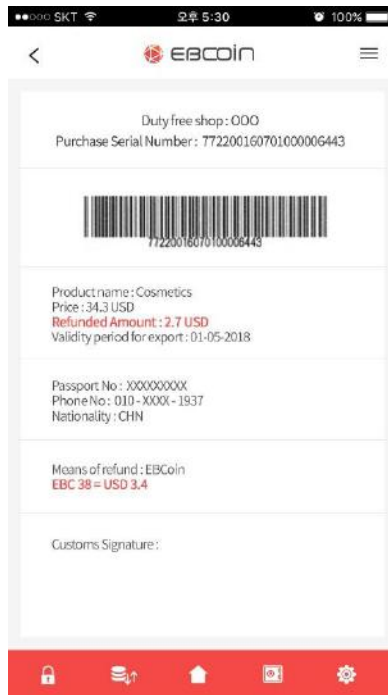
This will make the wallet available as SDK for Android and iPhone, which is easy to use especially in global shopping applications. If the user installs only an electronic wallet in the form of SDK, various services such as remittance and electronic payment using EBCoin will be available.



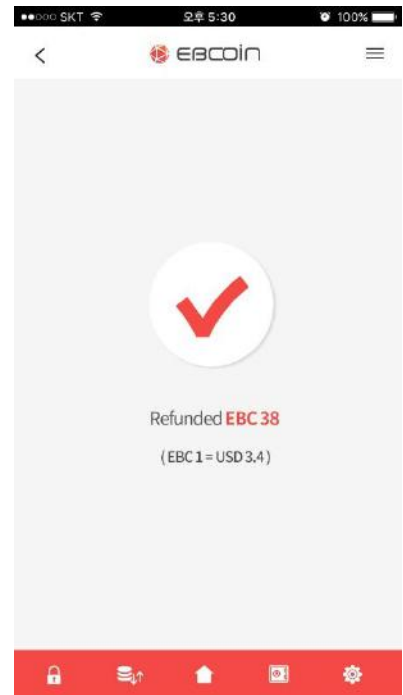
In the case of tax refund, foreign tourist can preserve information to scan their passport. In order to check the refund slip from the wallet, the acceptable refund method is only EBCoin.



1. Scan a passport



2. Confirm a Refund Slip

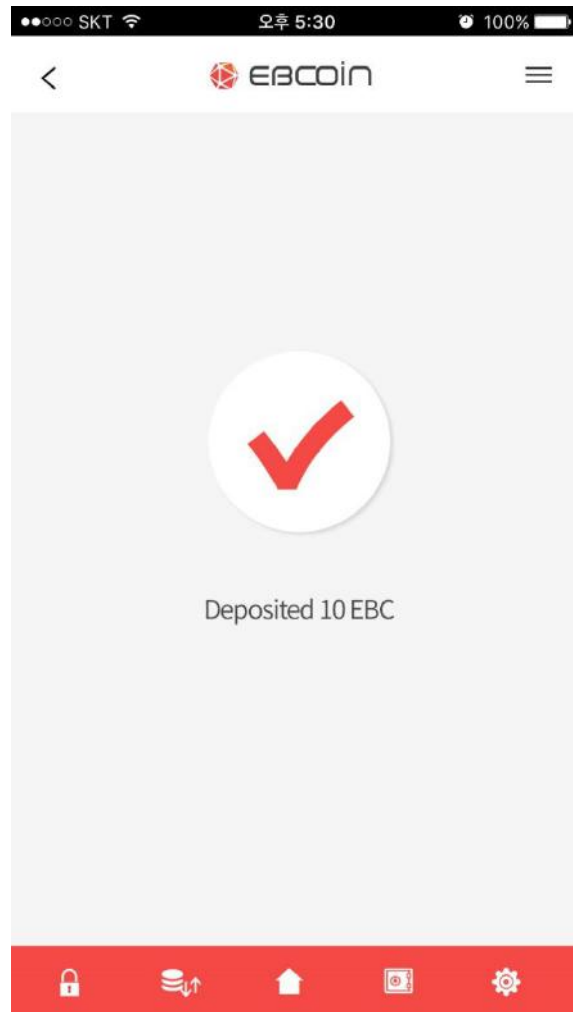


3. Refund EBCoin

The structure of customs: After scanning the purchase serial number of a wallet with the goods information and signing in with the private key, the coin is refunded to the wallet of the designated foreign tourists. For currency exchange, users can withdraw the rest of their money through KIOSK, ATM or currency Exchanges at airports. They can also receive EBCoin by sending it to their wallet address.

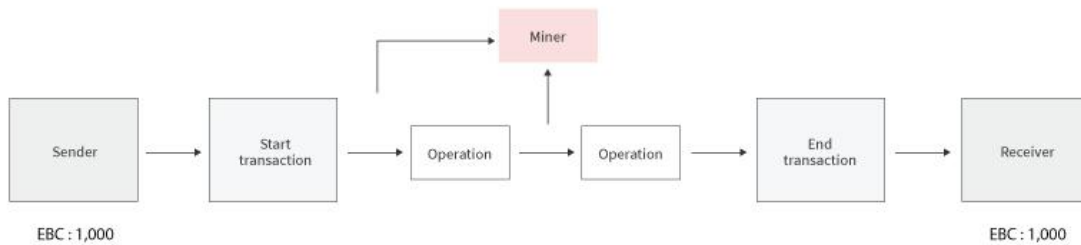
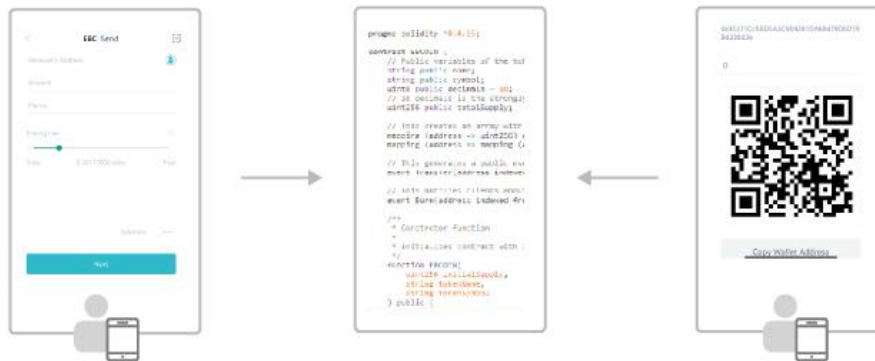


1. The address receiving exchanged amount



2. Confirm the result

All EBCoin received through refund and the exchange process can be used for value exchange and payment among users through the App. In addition, the user can use the blockchain as a reliable intermediary by recording transfer conditions in the smart contract according to the use of EBCoin.



The primary form of the App will include the function to distribute EBCoin through smart contract codes immediately upon token sale participation. The distributed coin can be confirmed in the user’s balance.

The second form is equipped with a password wallet function, which will support the Create/Import/Export functions for the private key. With this, a user can create passwords for EBCoin, Ethereum, Bitcoin and other cryptocurrencies.

Lastly, the third form utilizes both wallet and signature functions of the private key. It will be useful for direct transaction of the EBCoin among users. Also, the function for electronic payments between users and merchants using EBCoin, Ethereum and Bitcoin will be made available. Various forms of DApp with the EBCoin SDK; including tax refund, payments and currency exchange functions will be made available in several channels in each designated country.

4.2. Kiosk and ATM

In order to use EBCoin tax refund and exchange function conveniently, we would like to develop Kiosks linked with the EBCoin wallet and deployed at airports or duty free shops.

Kiosks will be deployed to supplement the manpower for customs in order to handle limited confirmation of exports. In addition, Kiosks will be required to apply export confirmation without visiting the customs departure inspection center when the cost of purchased goods is less than the predetermined refund amount.

In the case of the tax refund function, if passport information and refund documents are stored in the EBCoin wallet, customers can proceed for confirmation of exports at customs. If the traveler's passport or refund slip is not registered, then they can register the serial number barcode of their passport and refund slip through Kiosk's reader. This will be automatically synchronized with the EBCoin Wallet.

The functionality for Charging or withdrawal of local currency with EBCoin is also provided. With the DApp, it is possible to immediately deposit and withdraw EBCoin using the present exchange rate.

Since the Kiosk system and the EBCoin Wallet complement each other, the Kiosk will be used effectively when the DApp is unable to access the network or needs extra features for local currency withdrawal.



5. EBCoin Roadmaps

5.1. Direction of Business Model and Marketing

As a global payment gateway provider, we will require a large pool of merchants. We plan to recruit affiliates and partners to accommodate new and existing merchants on the platform. This way, we will remain competitive and the EBCoin will attract more online and offline business compared to other cryptocurrencies. We are planning to provide a free platform for our affiliates and partners; to support our coin and get paid. We will also provide features for attaining membership and saving points on the EBCoin platform.

5.2. Business Development and Release Roadmap

Below is the high level overview of Roadmap, Milestones and Deliverables that the EBCoin Team outlines for the next 4 years, following the token sale event.

Business Development

■ 4th Quarter 2017

- Establishment of EBC Foundation
- Pre-sale

■ 1st-2nd Quarter 2018

- Proceed with Crowd Sale and KYC / AML
- Partnership and MOU with related companies
- Finalize contracts with duty-free retailers and merchants using EBCoin Wallet

■ 3rd Quarter 2018

- KIOSK H/W Function design
- Lease agreement for deployment of KIOSK & ATM

■ 4th Quarter 2018

- Provide EBCoin Wallet to customs and proceed tax refund procedures training
- Proceed tax refund procedures training to duty free shops through EBCoin Wallet

■ 1st-3th Quarter 2019

- Plan to manufacture KIOSK & ATM
- Create KIOSK & ATM manual
- Pre-training about KIOSK & ATM deployment site and quantity calculation according to production cost
- Kiosk and ATM Deployment in Lotte Department Store (South Korea) and Incheon International Airport (South Korea)
- Contract with major airports in the world

■ 1st-2nd Quarter 2020

- Kiosk and ATM Deployment in Changi (Singapore), Chek Lap Kok (Hong Kong), Narita (Japan), Taoyuan (Taiwan) and Suvarnabhumi (Thailand) airport.

■ 2020-2021: Expand business reach of service to China and Europe

Machine Development and Wallet Release

■ 4th Quarter 2017

- Distribute EBCoin Wallet on both Android and iOS market (Provide the function for participating in the Token Sale)

■ 1st-2nd Quarter 2018

- Distribution of EBCoin Wallet - BTC, ETH, EBC transfer service offer
- Distribution of EBCoin Wallet – Tax refund process (Prototype)

■ 3rd Quarter 2018

- Design and module test for KIOSK & ATM
- Interconnection test for KIOSK & ATM & EBCoin Wallet
- Manufacturing of KIOSK & ATM H/W

■ 1st-2nd Quarter 2019

- KIOSK & ATM Prototype simulation
- Manufacturing of KIOSK & ATM and interlocking with the present rate of EBCoin in exchanges

■ 4th Quarter 2019

- Full pilot and testing

5.3. Token Sale and Use of the Proceeds

EBCoin Token Sale

EBCoin is an ERC20 token that is standardized on the Ethereum blockchain and is compatible with all applications that uses the same standard.

EBCoin will provide 750,000,000 EBC to the participants through token sales, which is 50% of the total supply of 1,500,000,000 EBC.

During the period of Pre-sale and the main Token Sale events, repeated participation is allowed and the EBC is sent via KYC to participants who received tokens during the pre-sale or token sale. Only Ethereum will be used for token purchases during the token sale.

The contributions will be used to build a one-stop service platform for payment, tax refund, foreign exchanges and transportation for international travelers.

Pre-sale

Conversion Rate: 1st Period	Conversion Rate: 2nd Period	Hard Cap
1 ETH = 34,500 EBC	1 ETH = 24,150 EBC	150,000,000 EBC

- Pre-sale 1st: December 7, 2017 (13:00 UTC + 8) ~ January 7, 2018 (13:00 UTC + 8)
- Pre-sale 2nd: January 7, 2018 (13:00 UTC + 8) ~ January 31, 2018 (13:00 UTC + 8)

The sales amount in pre-sale is 150,000,000 EBC, which is 20% of the total sales amount. If the amount to be raised is met before the date of end, the pre-sale will be closed automatically.

Crowd sale

Conversion Rate: 1st Period	Conversion Rate: 2nd Period	Hard Cap
1 ETH = 24,150 EBC	1 ETH = 20,000 EBC	600,000,000 EBC

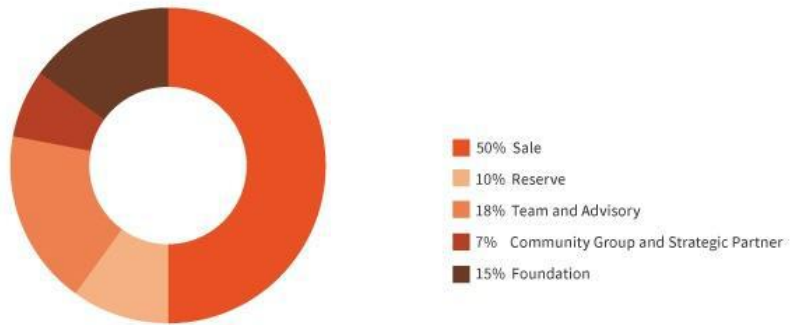
- Crowd sale 1st: January 16, 2018 (13:00 UTC + 8) ~ January 31, 2018 (13:00 UTC + 8)
- Crowd sale 2nd: February 1, 2018 (13:00 UTC + 8) ~ February 13, 2018 (13:00 UTC + 8)

During the crowd sale, 600,000,000 EBC is distributed, which is 80% of the total sales amount. If the amount to be raised is met before the end date, the token sale will be closed automatically.

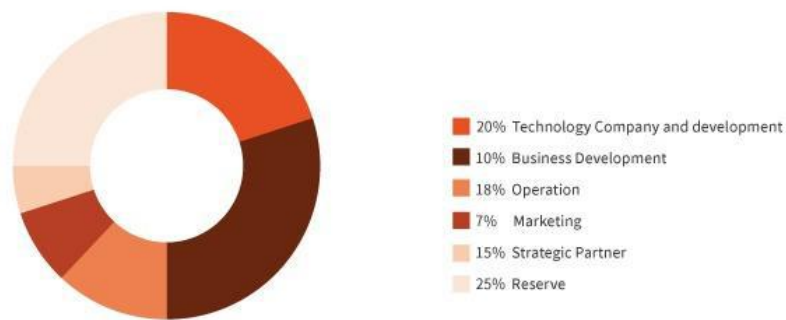
※ Unsold tokens from Crowd sale will be burned and tokens purchased during our token sales will be unlocked before listing on exchanges.

EBCoin Proceeds

Use of the token sale proceeds can be divided into two major sectors, which are token allocation and return on investment. Most of the proceeds will be invested in infrastructure expansion.



Token Allocation



Return on Investment

6. EBCoin Team

Executives

- Founder: Jason J. Kim



He started his career in graduate school and worked in Ecommerce and Payment area for 20 years. He interested in computer in his early childhood especially in the field of computer aided design, and won a prize in a related competition. He studied Computer Aided Engineering process design at the graduate school, and the experience allowed him to become a process design specialist. 2007 was the year when PayPal established AP headquarters in Singapore to enter the Asian market. In the same year, Jason established Eximbay in Singapore and launched a global payment service to prepare for the growth of the cross-border e-commerce market in Asia, including China. He has confidence in the potential of cryptocurrency as an expert in process design and global payment. Through the EBC project, he wants to open up a new world with his enthusiasm as an innovator and entrepreneur.

Diploma in SNU (Seoul National University) majored in Chemical Engineering

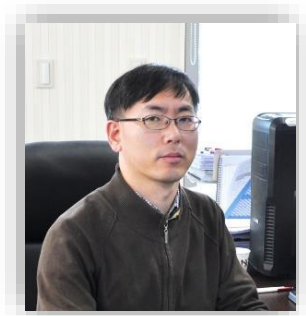
- Engineering in Graduate of SNU
- Founder of Eximbay Singapore
- Founder of KRPartners

- COO: Julius S. Han



Julius SK Han studied at PennState majoring in Economics with MA. After study, he worked for Daewoo Poland for 3 years experiencing globalization of corporates. He worked at global consulting firms like PWC and Deloitte Consulting. He provided Biz/Corporate Strategy consulting and Turn-Around consulting for top-tier companies in major industries like Banking, Insurance, IT, Electronics, Automotive and etc in South Korea. Through this consulting service, he got insights for each industry and profit/cost effective turnaround know-how for a corporate. Based on industry insight and experience, he raised GCMC as No 1 ranked DCC company in Korea in 4 years. As the end of 2017, GCMC has 1,700 merchants which have foreign customers, the tax-refund beneficiary. GCMC launched Vietnam JV in December 2017 and planning to launch a JV in Indonesia in Q2. He prepares those JV of GCMC as the front of AP for the EBCoin biz.

- CTO: Dustin H. Kim



He majored in Department of Statistics at Seoul National University and dropped out of his undergraduate school to build up his career. Because, He always believed that the right answer is always in the field.

He has been in various fields of Computing related fields. Based on his knowledge and experience, he led and participated in about 20 projects, including shopping mall, credit card communication interface, internal system, liquidation system and cryptocurrency solution development. He constantly focused on maximizing the value of the blockchain as a specialist of C language, Java, Objective-C, Oracle, NT and Mac. Currently, he acts as a bridge between the real world and blockchain as a CTO of the EBC project.

Seoul National University majored in Department of Statistics

- Co-founder of Tornado Tech
- System architecture expert

- CMO: Peter King



Peter is a trilingual international business strategist.

He majored in Money and Banking as well as International Business Strategy throughout his academic years from undergraduate to doctoral course in China and Korea.

Started with Gravity Corp., a NASDAQ listed game company, Peter has been in the ICT industries for almost 19 years. At Tencent, he developed the business model for online SNS service -QQ Zone as Senior Strategy Development Manager. And established Tencent's Korean Branch. At CJ E&M, he served as Senior Manager for Global Publishing Division. Furthermore, Peter joined Huawei Technologies as Senior Innovation Expert to create new business models. And later, he was appointed as Director of Game Center for Huawei Smart Phone Division.

As a business strategist, a professional communicator and a field veteran, Peter is very energetic and passionate like in his 20s. With experiences of entrepreneurship, he is confidently advancing through the cryptocurrency world.

Key Members

- Project Manager: Bruce W. Yang

He worked as an organizer in music and visual content services and has experience in viral marketing and social dating services as a founder. Afterwards, he worked as a team leader in planning department and head of operations. Currently, he is doing his best for the success of the EBCoin project as a project manager.

- Marketing Manager: Gerrard Y. Yang

Gerrard is graduated in Coventry University (UK) and Xi'an Jiaotong University (China). He is fluent in three languages, including his mother tongue as a multilingualist. Over the past few years, he participated in various blockchain related projects, such as overseas remittance and cryptocurrency. In this process, he was fascinated by the unlimited potential of blockchain and cryptocurrency, and is now on his way to becoming a blockchain expert. There is EBCoin on the way becoming the expert.

- Marketing Manager: Iris S. Jo

She majored in Literary Creation as a Bachelor's degree. She has been working as a content creator and PR manager for 7 years. She is in charge of domestic PR and online marketing at the present day.

- UI / UX Manager: Chloe C. Byeon

She majored in Visual Design at university. She participated in a number of projects, such as payment, network and finance, and had enjoyed a successful career as a web designer. She was wide awake and hungry for new challenges and values, finally faced with a turning point in her life by encountering blockchain and cryptocurrency. She is currently responsible for UI / UX for EBCoin and is concentrating on creating visualization of EBCoin.

Advisory

- J. Michael Bradley



Mr. Bradley has 22 years' experience in FinTech and SaaS companies; he was most recently Managing Director Asia Pacific for CyberSource and Vice President, at Visa Inc. (NYSE: V). Currently, he is in charge of many fintech venture companies' advisory as a Fintech Industry Veteran. He is a successful and innovative executive with a strong track record of delivering bottom line results in venture backed companies as well as global organizations. His industry expertise includes payments processing, online fraud and security systems, and digital commerce. He has built sales, services, and marketing organizations at regional and global levels. As head of Visa's CyberSource division in Asia Pacific, he managed teams covering 14 markets, achieving impressive growth results and building strategic partnerships with regional and global institutions. He was a company director for corporate subsidiaries in the U.S., Singapore, and Australia. Earlier in his career, he held various sales, product and business development management roles in private and public companies, including Visa, Inc. (NYSE: V).

- Completed INSEAD's Executive Program for Strategies in Asia Pacific.
- Master's degree in Business Administration, University of San Francisco as Fellowship Recipient
- Bachelor's degree in Arts, University of California, San Diego

Mr. Bradley is a U.S. citizen and a permanent resident of Singapore. He is married and has two children. His personal interests include outdoor activities (skiing, fishing, cycling, tennis), cooking, and travel. He played soccer professionally in the U.S. and Europe.

- Mike Templeman (CEO of Foxtail Marketing in U.S.)



Mike Templeman is the CEO of Foxtail Marketing, a digital-content marketing firm specializing in B2B SaaS. He is passionate about tech, marketing and small business. When not tapping away at his keyboard, he can be found spending time with his kids. He is a seasoned cryptocurrency researcher and strategist, and has helped dozens of blockchain projects bring their solutions to the market successfully.

- Nguyen Huu Tuat (Co-founder & CEO, MPOS GLOBAL GROUP)



Co-Founded PeaceSoft-group (now rebranded to NextTech Group) in 2001 when being a first-year student, Nguyen Huu Tuat has over 10 years of experience in Vietnam's ICT and Internet industry. Graduation from Vietnam National University with a variety of awards including: Vietnam Wisdoms, Scientific Research, Informatics Talents ... and received Chief Security Officer Award 2009, the first Award for CSO in Indochina.

Over the years, as the CTO of PeaceSoft Group, Mr.Tuat has been playing an important role in leading PeaceSoft to pioneer into several new technology trends in e-commerce, e-payment and online advertisement network which has built prestige for the company with recognition including: Golden-star award, Best software of the year, Best e-commerce platform, Most favorite payment platform, Red Herring Asia/Global winner (Asia and Global 's top 100 start-up companies)... PeaceSoft has received many funding from world and region's leading Internet groups including: IDG, SoftBank, eBay and MOL/Berjaya.

- Jacob S. Lee (CEO, KCS)



Mr. Lee is a startup consultant, business feasibility analysis and business planning specialist. He started business start-up in 2009 when he was a university student. Afterwards, he participated in numerous patent registration and government research and development projects, and received many awards in business planning and business planning.

As a person in charge of technology planning and consulting, he participated in more than 1,000 technology development and technology commercialization projects. Finally, he achieved excellent results in the industry.

Currently, he established KCS, a specialized company in cryptocurrency for the stable settlement in the cryptocurrency industry, and he is conducting token sale event analysis, marketing, and education for cryptocurrency and participation.

- Wyeth Lee (Chief Regional Officer of Omni Commerce in China)



Wyeth Lee is an Internet business and digital marketing specialist who has successfully led business development in China for the last 20 years.

Over the past 20 years, he has served as chief executive officer of China's IT companies and digital marketing companies (Samsung Group (China Head Office, Samsung SDS, Open Tide China)) for 12 years. As a specialized angel investor for finding and developing domestic venture companies, he is supporting strategic consulting and entering into local area to venture and start-up companies planning to enter China.

In addition, Omni Commerce Co., Ltd, the only overseas business partner of China Telecom in South Korea, is leading various expansion projects, including BestPay in South Korea, Japan, and Taiwan. On the basis of the experiences and insights with regard to industry and marketing in China, he intends to establish alliances with Chinese companies.

Bibliography

1. Bitcoin: <https://bitcoin.org/bitcoin.pdf>
 2. Ethereum: <https://github.com/ethereum/wiki/wiki/White-Paper>
 3. BlockChain : <https://www.blockchain.com/>
 4. BlockChain: https://assets.korbit.co.kr/docs/Korbit-White_Paper-Block_Chain_Primer-1.pdf
 5. ERC20: <https://steemit.com/kr/@uijujeong/erc20>
 6. CHAINTALK: <http://www.chaintalk.io/>
 7. Duty Free & Tax Refunds: https://english.visitkorea.or.kr/enu/SHP/SH_ENG_1_1.jsp
-

Other Links

1. KRPARTNERS: <http://company.kr.net/>
 2. EXIMBAY: <https://www.eximbay.com/>
 3. GCMC: <http://www.thegcmc.co.kr/>
-

Contact Support

1. Official Website: <http://www.ebcoin.io>
2. Slack: <http://ebcoin.slack.com>
3. Telegram: <http://goo.gl/326oaX>
4. Email: support@ebcoin.io