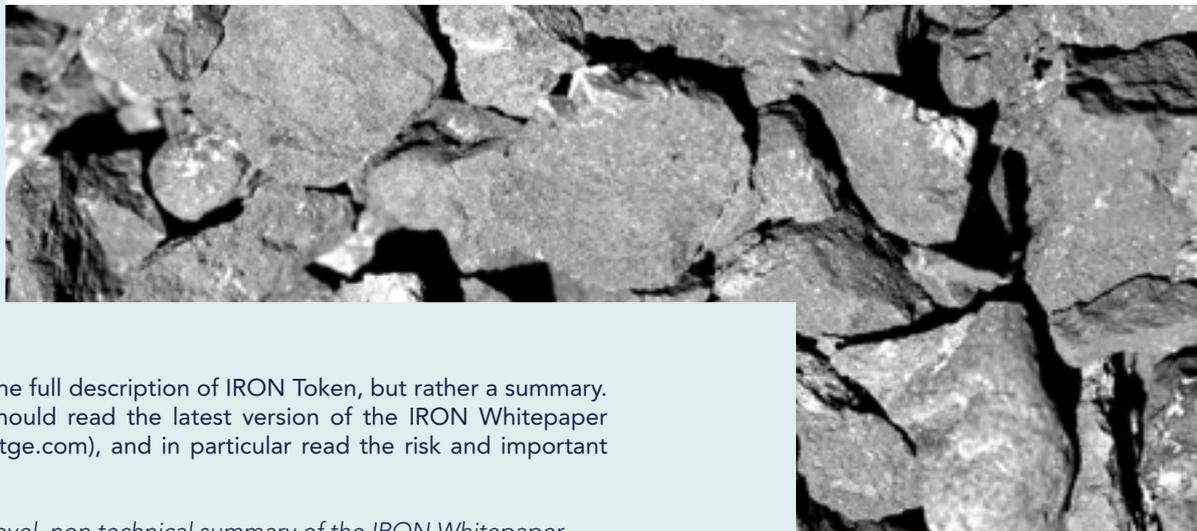




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# IRON Token

## The World's first SmartCommodity™



/Important: This is not the full description of IRON Token, but rather a summary. All interested parties should read the latest version of the IRON Whitepaper located at (<https://iron-tge.com>), and in particular read the risk and important notice disclosures.

*The following is a high level, non technical summary of the IRON Whitepaper.*

## What is IRON Token?

The subsidiary Element Iron AS (“IRON Issuer”) of the listed Norwegian company Element ASA (“Element”) introduces the world’s first asset linked *smart commodity* built on blockchain technology (*SmartCommodity™*).

The IRON Token is both a financial and a real world innovation that is set to disrupt the multibillion dollar iron-ore industry and primed to a trusted stable coin and the standard for payment across the whole iron-ore industry worldwide.

IRON Token enables faster, cheaper and more transparent trading of global assets, reducing settlement costs, increasing liquidity, removing financial barriers in emerging markets and providing a technology platform that will enable further commodities market innovation.

## IRON-Ore: An industry ready for disruption

Farmers have used a simple form of futures trading in the commodity market for centuries as a way of managing long term risk. *Futures contracts* are a type of derivative contracts - legal agreements to buy or sell something at a predetermined price at a specified time in the future.

By purchasing futures contracts, the farmers are able to lock in a fixed price for their products at a set time in the future and so protect themselves from both price fluctuations and also to offer insurance against future currency movements, especially if they are trading outside of their own country. Although the IRON Token is not a *future contract* it bears certain similarities to such contracts.

As modern industrial societies have evolved, the scale, complexity and interdependencies of global commodities markets have radically increased.

Nowhere is this change more evident than with iron-ore. Mined in over 50 countries, it is the main ingredient of steel, which in turn is the basis of modern industrial economies.

Iron-ore was first offered on industrial derivatives markets in 2008, with the market more than doubling each year between 2008 and 2012 <sup>1</sup>.

However this rapid growth and rise in complexity of global supply chains has highlighted a number of problems within the iron-ore market and with the systems that support the global commodities markets:

1. Extracting iron-ore is a complex and long term investment, however the current trading iron-ore futures markets only allow for a delivery as far as 36 months out.
2. Emerging economies with rising iron-ore production have underdeveloped banking systems which means there is a lack of standardisation in cross-border payments, leading to slow settlement and additional systemic risk.
3. Existing payment solutions to order and take delivery of iron-ore are slow and expensive with high fees and bank friendly exchange rates.
4. Trade barriers makes trading between certain countries difficult.

<sup>1</sup> [http://www.internationalresourcejournal.com/the\\_importance\\_of\\_iron\\_ore\\_derivatives/](http://www.internationalresourcejournal.com/the_importance_of_iron_ore_derivatives/)

## The blockchain revolution

In 2008 Bitcoin appeared, bringing with it blockchain computing, technology which has the capacity to facilitate secure, rapid and transparent exchange of value without need for trusted third parties in the same way the internet enables the secure, rapid and decentralised exchange of information through networks.

Blockchain technology enables individuals and corporations to freely and rapidly transact with one another regardless of geographic constraints, whilst *smart contracts* reduce transaction costs associated with contracting and offer exciting new opportunities for innovation in supply chain and risk management by creating agreements that are automatically executed by blockchain computers.

In the blockchain ecosystem, digital tokens can represent both fungible assets, where every digital token is identical and interchangeable like a currency, and non-fungible assets, where each token is unique and provably scarce.

Digital tokens can therefore represent new global payment methods for hard assets such as metal and other commodities, as well as being able to represent, secure and track the production and supply of finite resources such as iron-ore, that are able to be traded through new digital and borderless marketplaces.

This tokenized approach enables the purchase, delivery and trading of hard assets to become more cost efficient with less reliance on third parties and existing banking systems, in turn reducing overall systemic risk and ensuring more predictable long term growth. As such, programmable digital tokens have emerged as a new alternative channel for companies to raise capital and as an entirely new asset class for investors.

The issuance of digital tokens as a mechanism to raise capital is commonly referred to as a Token Generating Event ("TGE").

## The volatility problem

The nascent crypto-currency market is hugely volatile. Bitcoin, Ether and Litecoin, along with an emerging ecosystem of *altcoins* currently see daily fluctuations of up to  $\pm 25\%$  making them poor payment mechanisms and high risk investments for both amateur and professional investors.

In the last six months, some of the world's biggest venture investors have invested hundreds of millions of dollars in a range of *stable coins*<sup>2</sup>, each designed with mechanics aimed at adding predictable pricing to the market. They all approach the problem in different ways, from baskets of algorithmically adjusting tokens to stable coins that track the consumer price index.

These startups are setting out to solve a huge systemic problem within the crypto-economy, however they will all need to earn their trust over time. There is significant opportunity for a stable coin that offers immediate trust and transparency that can both lower volatility and offer safer long term investment for the multi-billion dollar crypto-economy.



<sup>2</sup> <https://arstechnica.com/tech-policy/2018/04/why-investors-pumped-133-million-into-stablecoin-basis/>

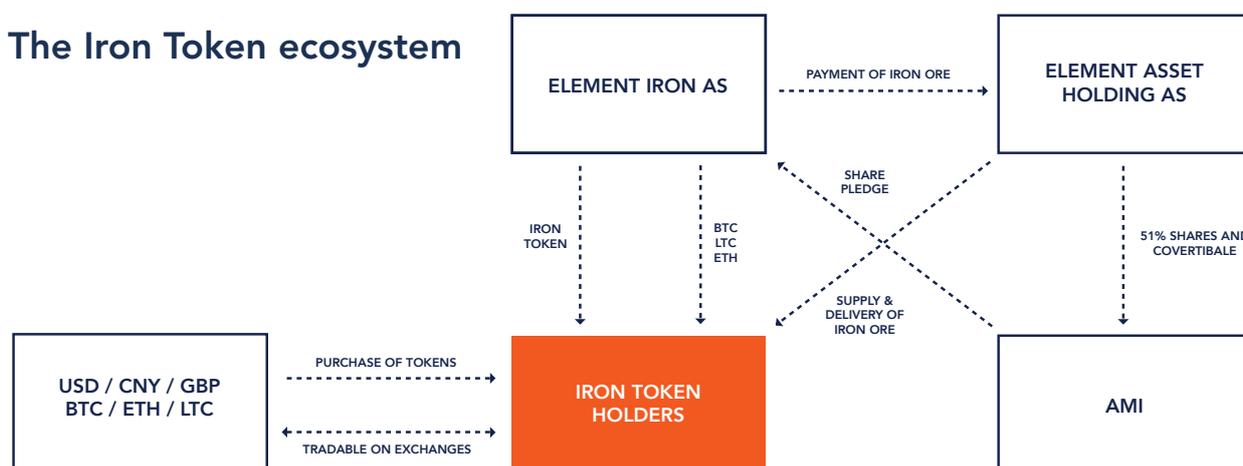
## Introducing SmartCommodity™ – The Iron Token

Backed by the listed Norwegian listed company Element, the IRON Token is the world’s first SmartCommodity™ - an asset linked iron-ore token built on the Ethereum blockchain.

By leveraging blockchain technology alongside smart contracts that execute transactions automatically, the IRON Token is able to deliver a series of financial innovations that will disrupt the multi billion dollar iron-ore industry and create a trusted and transparent new entrant into the fast growing crypto-currency market:

1. The world’s first public company, to our knowledge, to announce plans to raise capital via a TGE.
2. An iron-ore asset linked stable-coin from a trusted and transparent listed company that is significantly less volatile than other crypto-currencies.
3. A token with real utility, enabling the purchase and delivery of iron-ore at any point from 2020 and before 2040<sup>3</sup>.
4. The standard for payment across the whole iron-ore industry.
5. Potential for use as a settlement mechanism in transactions between industry players as an alternative, link or supplement to traditional contracts.

### The Iron Token ecosystem



<sup>3</sup> Element will use its best endeavours to deliver iron-ore at any given point, although please note that the IRON token does not include the legal right for delivery of Iron ore or any other asset.

## Element Asset Holding AS

The value of IRON Tokens will be linked to the iron-ore assets in Element Asset Holding which holds ownership/ rights to approx. 50% (on certain conditions) of an NI-43101 compliant resource of 336 million tons of iron-ore with production expected to start in Q3 2018.

1 IRON Token is equivalent to and exchangeable for 1 metric ton of 62 % FE iron-ore. The estimated spot price in the open market is 65 USD per ton as of 9 July 2018.

Tokenholders do not have a legally enforceable right to delivery of iron-ore, but through the security provided to the IRON Issuer in iron-ore assets the IRON Issuer should under normal circumstances hold sufficient values which are expected to enable correct delivery upon request from Tokenholders.

## Element Iron AS

IRON Issuer is a Norwegian subsidiary of the listed company Element ASA; [www.elementasa.com](http://www.elementasa.com), the world's first TGE issuer backed by a listed company.

## Ambershaw (AMI)

IRON Issuer will hold security in iron-ore through a pledge of Element Asset Holding's shares and bonds in Ambershaw Metallics Inc (AMI), a metals and a mining company in British Columbia, Canada. The shares are currently owned by Element ASA and shall be transferred to Element Asset Holding in conjunction with this IRON Token Generating Event ("IRON TGE").

## Iron Token Holders

The security provided by Element Asset Holding to IRON Issuer is intended to secure that Iron Issuer holds values enabling it to deliver iron-ore upon request by Tokenholders.

## The Token Generation event (TGE)

Subscribers can subscribe for IRON Tokens by paying into escrow either BTC, LTC and ETH. Funds collected in BTC, LTC and ETH will be converted into US dollars within 10 business days following a successful closing of this IRON TGE.

## Exchange listing

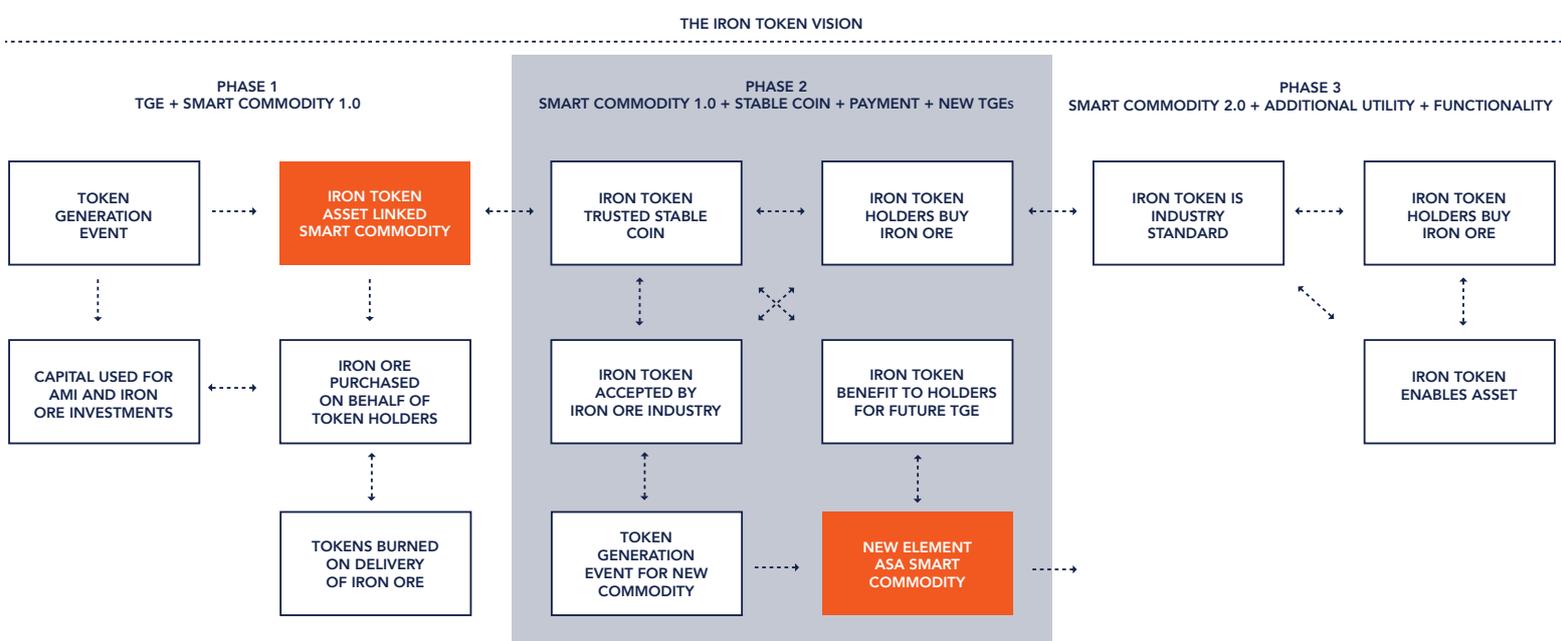
The IRON Token is planned to be listed on various crypto exchanges although no such listing can be guaranteed. IRON Issuer has identified various exchanges that are relevant for the listing of the IRON Token and has had discussions to ensure a swift listing process. The first 1,000 subscribers of IRON Token will get one free ELE Token per IRON Token subscribed airdropped into their digital wallets after conclusion of the IRON TGE. Element is planning several other tokens for other metals, and the ELE Token will give preferential allocation in any future TGEs launched by Element's subsidiaries, encouraging the adoption of the IRON Token as a future global standard in the SmartCommodity TM market.

## SmartCommodity™ – The next generation of elements assets

ELE Tokens will give its owners priority access to and potential discounts on future SmartCommodity™ TGEs that Element intends to launch in the future through subsidiaries.

Element has announced to the market that it at some point intends to complete SmartCommodity™ TGEs on other natural resource assets, such as Nickel, Silver, Zinc and Lead.

## A vision for the future of Smart Commodities



## Iron Ore – A growth market

The majority of iron-ore is mined in Brazil, Canada, Australia, China, India, the US and Russia. Australia and Brazil together dominate the world's iron-ore exports, each having about one-third of total exports.

Worldwide iron-ore resources are estimated to exceed 800 billion tons of ore, containing more than 230 billion tons of iron <sup>4</sup>.

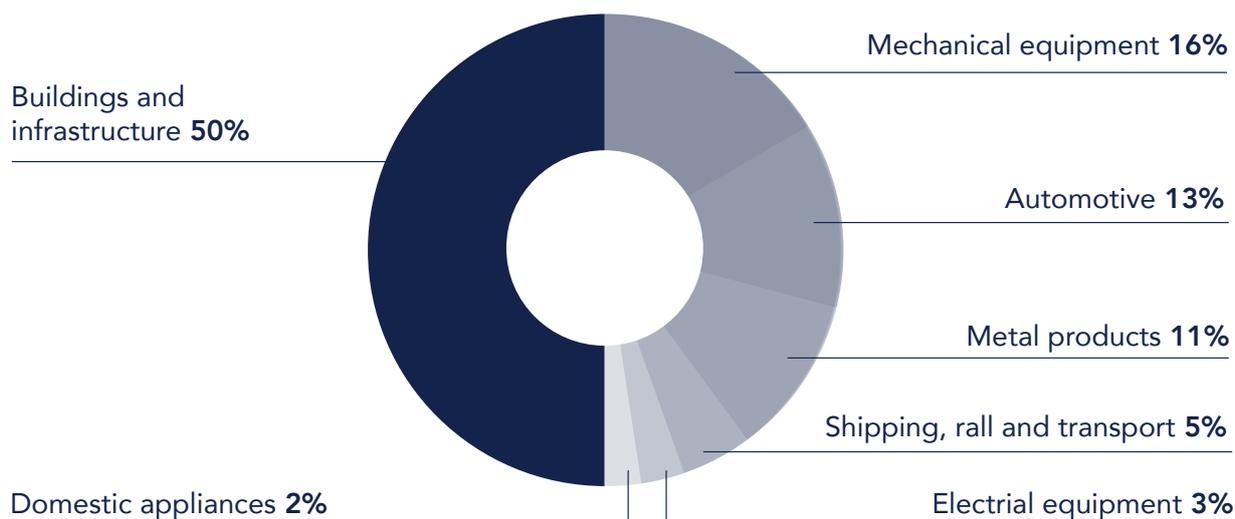
Based on the world's population increase combined with 10 years insufficient investments in the commodities field the supply and demand curve is set to move sharply upwards.

World crude steel production reached 1,700 million tons (Mt) for the year 2017 <sup>5</sup>.

<sup>4</sup> <https://minerals.usgs.gov/minerals/pubs/mcs/2018/mcs2018.pdf>

<sup>5</sup> <https://minerals.usgs.gov/minerals/pubs/mcs/2018/mcs2018.pdf>

## Industries that use the most steel



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## Use of proceeds in the Iron TGE

Capital raised in the IRON TGE and through sale of IRON Tokens will be used for Element Group’s investment in iron-ore projects. Currently the Element ASA’s iron-ore investment is AMI in which the Element ASA has invested a total of MUSD 7.8. AMI is estimated to have, if developed as planned, an estimated Net Present Value of USD 498 Million on a 100% basis.

The proceeds raised in the IRON TGE, less the cash amount held in escrow and costs born by IRON Issuer will flow from IRON Issuer to Element Asset Holding in exchange for security from Element Asset Holding to IRON Issuer, in AMI. The guaranteed and pledged amount under the security will equal 110% of the amount raised in the TGE. 10% of the gross funds raised in the TGE will be held by IRON Issuer on the Cash Account to ensure that the IRON Issuer has liquid funds available for immediate usage if any Tokenholder chooses to exchange tokens for iron-ore – (see the IRON Whitepaper for more information.)

The proceeds will be used as follows:

- Up to MUSD 7.8 million to Element Asset Holding as repayment of the investment in AMI
- Cost related to the TGE
- 5% Management Fee to Element
- Excess funds will be used to invest in iron-ore projects at the Element Group’s discretion

<sup>6</sup> <https://www.worldsteel.org/en/dam/jcr:f9359dff-9546-4d6b-bed0-996201185b12/World+Steel+in+Figures+2018.pdf>



## Security and increase of security

Element Asset Holding will provide security to IRON Issuer through a guarantee secured by a pledge of shares and bonds in AMI in the amount raised in the TGE + 10%. This is further explained in the Whitepaper.

Capital raised in any subsequent TGE will be secured by an increase of the secured amount under the pledge provided by Element Asset Holding. When the IRON Issuer sells more IRON Tokens than the tokens offered in this round, Element Asset Holding will increase the guarantee and security granted to IRON Issuer accordingly. IRON Issuer will at all times hold security valued at the amount of capital raised + 10%, however the obligation to pledge shall be limited to the iron-ore assets held by Element Asset Holding. The security is provided to IRON Issuer as beneficiary, not the Tokenholders.



## Project roadmap and milestones

- **November 2016**  
Element invests in AMI and receives an option to own of 51% of the company.
- **October 2017**  
Element board approves initiation of asset secured token creation and enters agreement with Harmony Chain to develop the IRON Token.
- **Q1 2018**  
Element investigates and evaluates various jurisdictional alternatives for the IRON TGE. Element agreed final funding agreement and schedule for its investment in AMI.
- **May 2018**  
Element enters into Letter of Intent (LOI) with Auplata SA to purchase Moroccan mining assets and expand crypto asset development platform.  
Element has meetings with Norwegian Financial Authority to explore Norwegian TGE path.
- **June 2018**  
Element receives favorable feedback from Norwegian Financial Authority regarding the IRON TGE falling outside of the regulatory framework in Norway, allowing Iron Issuer to proceed with the IRON TGE in Norway.  
Element completes the final funding to AMI as a MUSD 4.85 convertible loan with 7% interest convertible into shares in AMI.
- **July 2018**  
Element releases IRON whitepaper and starts presale discussions with industry participants.
- **September 2018**  
IRON Token Pre-sale estimated to close and public IRON TGE starts.
- **October 2018**  
IRON TGE is estimated to complete; IRON Tokens are distributed and ELE Tokens are awarded.
- **November 2018**  
IRON and ELE Tokens start trading on various exchanges.

*The preliminary terms and conditions provided by this document are subject to change and shall not constitute an offer of any Iron Tokens or financial instruments by IRON Issuer. The offer for Iron Tokens will, if ever made, be subject to the final terms and conditions of a White Paper expected to be published and approval by the board of directors of Element IRON*