CLAIMS

1. A computer method for administering a commodity material transaction, comprising:

receiving, by a processor, via a first graphical user interface (GUI) from a seller computing device, an ask price for a quantity of a commodity material; receiving, by the processor, via a second GUI from a buyer computing device, a bid price for the quantity of the commodity material;

determining, by the processor, that the ask price and the bid price meet a match criterion, wherein the match criterion requires the bid price to be at least equal to or greater than a predetermined threshold amount relative to the ask price;

receiving, by the processor, a first cryptocurrency transaction corresponding to the bid price from a buyer wallet into a transaction wallet;

transmitting, by the processor, a second cryptocurrency transaction corresponding to the ask price from the transaction wallet to a seller wallet;

issuing, by the processor, a distributed ledger token corresponding to the quantity of the commodity material; and

transmitting, by the processor, the distributed ledger token to the buyer wallet.

2. The computer method of claim 1 , wherein the ask price is denominated in a first currency, the first currency comprising at least one of United States dollars or cryptocurrency.

3. The computer method of claim 2 , wherein the bid price is denominated in a second currency, second currency comprising a different currency than the first currency.

4. The computer method of claim 1 , wherein the bid price is denominated in a second currency, the second currency comprising the same currency as the first currency.

5. The computer method of claim 1 , wherein the commodity material comprises an in-ground ore or coal.

6. The computer method of claim 5, wherein the quantity comprises a quantity of refined metal produced from the in-ground ore.

7. The computer method of claim 1 , wherein the commodity material is to be produced at a future date.

8. The computer method of claim 1 , wherein the commodity material exists in a transportable form at the moment of distributed ledger token issuance.

9. The computer method of claim 1 , wherein the commodity material comprises mined ore or coal.

10. The computer method of claim 1 , wherein the commodity material comprises natural gas.

11. The computer method of claim 1 , wherein the commodity material comprises an agricultural product.

12. The computer method of claim 1 , further comprising:

receiving a second ask price for the distributed ledger token at a later date; wherein the distributed ledger token represents the same distinguishable instance of the commodity material as when the distributed ledger token was issued.

13. The computer method of claim 1 , further comprising:

receiving notice that the distinguishable instance of the commodity material is delivered;

receiving payment for the delivered commodity material; and

redeeming the distributed ledger token for a currency corresponding to the received payment.

14. The computer method of claim 13, wherein the distributed ledger token is burned when redeemed.

15. The computer method of claim 13, wherein the value of the distributed ledger token is reset to zero when redeemed.

16. The computer method of claim 1 , wherein the value of the distributed ledger token is set to equal the current value of the quantity of the commodity material.

17. The computer method of claim 16, whereby the distributed ledger token is asset-backed by the distinguishable instance of commodity material it is issued to represent.

18. A non-transitory computer-readable medium carrying computer instructions to cause a computer to execute a method, comprising:

receiving, via a first graphical user interface (GUI) from a seller, an ask price for a quantity of a commodity material, denominated in a first currency; receiving, via a second GUI from a buyer, a bid price for the quantity of the commodity material, denominated in a second currency;

determining that the ask price and the bid price meet a match criterion; receiving a first cryptocurrency transaction corresponding to the bid price from a buyer wallet into a transaction wallet;

transmitting a second cryptocurrency transaction corresponding to the ask price from the transaction wallet to a seller wallet;

issuing a distributed ledger token corresponding to the quantity of the commodity material; and

transmitting the distributed ledger token to the buyer wallet.

19. A computer method for conveying value associated with a commodity, comprising:

issuing, with a server computer, a distributed ledger token corresponding to a distinguishable instance of a commodity; and

outputting, with a web server for display via a graphical user interface (GUI) on a user device, information corresponding to the distributed ledger token and the distinguishable instance of the commodity, the information including at least one of: a benchmark price for the distinguishable instance of the commodity, an estimated price for the distinguishable instance of the commodity, an historical price for the distinguishable instance of the commodity, a modeled price for the distinguishable instance of the commodity, a currency exchange rate for accepted transaction currencies for the distinguishable instance of the commodity;

wherein the distributed ledger token represents ownership of the distinguishable instance of the commodity.

20. The computer method for conveying value associated with a commodity of claim 19, wherein issuing the distributed ledger token comprises issuing a public blockchain token.

21. The computer method for conveying value associated with a commodity of claim 19, wherein issuing the distributed ledger token comprises issuing a permissioned blockchain token.

22. The computer method for conveying value associated with a commodity of claim 19, wherein issuing the distributed ledger token comprises issuing a private blockchain token.

23. The computer method for conveying value associated with a commodity of claim 19, wherein issuing the distributed ledger token corresponding to the distinguishable instance of the commodity comprises:

parsing property data related to one or more physical properties of the distinguishable instance of the commodity;

hashing the property data; and

adding the property data onto the distributed ledger as a transaction.

24. The computer method for conveying value associated with a commodity of claim 23 , further comprising: receiving property data from a seller device, the data corresponding to the one or more physical properties.

25. The computer method for conveying value associated with a commodity of claim 19, wherein issuing the distributed ledger token corresponding to the distinguishable instance of the commodity comprises:

parsing availability data related to a projected date or time of availability of the distinguishable instance of the commodity;

hashing the availability data; and

adding the availability data onto the distributed ledger as a transaction.

26. The computer method for conveying value associated with a commodity of claim 19, further comprising:

receiving, via the web server, certification data corresponding to a certification of one or more parameters corresponding to the distinguishable instance of the commodity.

27. The computer method for conveying value associated with a commodity of claim 19, further comprising:

transferring ownership of the distributed ledger token from a seller to a buyer;

wherein transferring ownership of the distributed ledger token also transfers ownership of the distinguishable instance of the commodity

corresponding to the distributed ledger token.

28. The computer method for conveying value associated with a commodity of claim 27, wherein transferring ownership of the distributed ledger token comprises:

establishing, using at least the server computer, a selling valuation and a corresponding buying valuation for the distributed ledger token;

receiving, via the web server, an acceptance of at least one of the selling valuation or the buying valuation;

receiving, via the web server, a cryptocurrency, second distributed ledger token, or cryptocurrency and second distributed ledger token transaction equal to the buying valuation from at least one buyer resource;

transmitting, via the web server, the distributed ledger token to the at least one buyer resource; and

transmitting, via the web server, a cryptocurrency, second distributed ledger token, or cryptocurrency and second distributed ledger token transaction equal to the selling valuation to at least one seller resource.

29. A non-transitory computer readable medium carrying computer instructions capable of causing a computer to execute a method comprising: issuing, with a server computer, a distributed ledger token corresponding to a distinguishable instance of a commodity; and

outputting, with a web server for display via a graphical user interface (GUI) on a user device, information corresponding to the distributed ledger token and the distinguishable instance of the commodity;

wherein the distributed ledger token represents ownership of the distinguishable instance of the commodity.

30. A computer method for transferring an interest in a commodity, comprising:

receiving, into a server computer from a first user via a graphical user interface (GUI) displayed on a remote user device and a network, a private key and an image of a proof of ownership of a distinguishable instance of a commodity;

generating a smart contract conveying conditional ownership of the distinguishable instance of the commodity;

issuing, with the server computer, a first quantity of electronic tokens on a distributed ledger, the first quantity of electronic tokens carrying the smart contract such that the first quantity of electronic tokens are capable of collectively representing ownership of the distinguishable instance of the commodity;

transferring at least a portion of the first quantity of electronic tokens to a first user electronic wallet corresponding to the first user;

receiving, from the first user via the graphical user interface (GUI) displayed on the remote user device, an offer to sell at least a portion of the first quantity of electronic tokens;

listing at least a portion of the first quantity of electronic tokens on an electronic token exchange; and

transferring at least a portion of the first quantity of electronic tokens from the first user electronic wallet to a buyer wallet using an exchange settlement service disposed on a second server computer.

31. The computer method for transferring an interest in a commodity of claim 30, further comprising:

encrypting and storing the proof of ownership at a secret location; and hashing data corresponding to the secret location onto the first quantity of electronic tokens using a distributed ledger transaction.

32. The computer method for transferring an interest in a commodity of claim 30, wherein the secret location comprises a networked storage address.

33. The computer method for transferring an interest in a commodity of claim 32, wherein the networked storage address is made secret by encrypting the networked storage address before hashing the encrypted storage onto the first quantity of electronic tokens on the distributed ledger.

34. The computer method for transferring an interest in a commodity of claim 30, wherein the smart contract condition is satisfied by binding transfer of the distinguishable instance of the commodity to the first quantity of electronic tokens and transfer of at least a portion of the first quantity of electronic tokens to the first user electronic wallet.

35. The computer method for transferring an interest in a commodity of claim 34, wherein the binding transfer of the distinguishable instance of the commodity includes signing the smart contract using the private key.

36. The computer method for transferring an interest in a commodity of claim 34, further comprising:

transmitting a public key to the electronic token exchange, the public key being configured to enable a buyer to view the proof of ownership without knowing the secret location.

37. The computer method for transferring an interest in a commodity of claim 30, wherein receiving, from the first user via a remote device, an offer to sell at least a portion of the first quantity of electronic tokens includes establishing an ask price for an electronic token.

38. The computer method for transferring an interest in a commodity of claim 37, wherein establishing an ask price for the electronic token includes receiving an ask price from the first user via the GUI displayed on the remote user device and the network.

39. The computer method for transferring an interest in a commodity of claim 30, wherein listing at least a portion of the first quantity of electronic tokens on an electronic token exchange and transferring at least a portion of the first quantity of electronic tokens from the first user wallet to a buyer wallet using an exchange settlement service disposed on a second server computer includes:

receiving a bid price from a buyer via a buyer device and the network; determining that the ask price and the bid price meet a match criterion; transferring the electronic token to a second user wallet corresponding to the second user; and

transferring a settlement price to the first user wallet.

40. The method of claim 1, wherein the predetermined threshold amount relative to the ask price is an amount lower than the ask price.