Claims:

1. A system for generating fuel stocks in a fabricated biocolumn comprising of zones, fabricated by assembling modules of biocolumn,
   Inputting a nutrient, a renewable energy source, photon energy and a carbon source into said zones and outputting fuel stock and by products from zones; wherein zones are interconnected so that byproducts from each zone can be recycled as input or transformed into product.

2. The system for generating fuel stocks in a fabricated biocolumn according to claim 1, wherein each module can further be divided into submodules.

3. The system for generating fuel stocks in a fabricated biocolumn according to claim 2, wherein submodules are assembled to fabricate a module.

4. The system for generating fuel stocks in a fabricated biocolumn according to claim 1, wherein photon energy is obtained from submerged LED.

5. The system for generating fuel stocks in a fabricated biocolumn according to claim 1, wherein said renewable energy source is a geothermal energy, a solar thermal energy, a photovoltaic energy, an external waste heat, a heat of internal reactions or combinations thereof.

6. The system for generating fuel stocks in a fabricated biocolumn according to claim 1, wherein said nutrient is selected from the group consisting of a geothermal fluid, an organic waste slurry biomass, a coal, a hydrocarbon and combinations thereof.

7. The system for generating fuel stocks in a fabricated biocolumn according to claim 1 or 6 wherein said nutrient is water containing.

8. The system for generating fuel stocks in a fabricated biocolumn according to claim 1, wherein said carbon source is selected from the group consisting of atmospheric air, a carbon dioxide source, an organic waste, a coal, a hydrocarbons, a geothermal fluid, an internal product of said consortium growth, propagation and reaction, and combinations thereof.

9. The system for generating fuel stocks in a fabricated biocolumn according to claim 1, wherein said modules are interconnected to function as a complete biocolumn.

10. The system for generating fuel stocks in a fabricated biocolumn according to claim 4, wherein LEDs operating at a fraction of the normal intensity of sunlight (approximately one-sixth) at just the level at which algae growth plateaus, before additional light intensity is wasted or actually inhibits additional growth, are used.

11. The system for generating fuel stocks in a fabricated biocolumn according to claim 4, LEDs that are pulse to allow the proximate algae to recover from the acceptance of a photon and be ready to receive another are used.

12. The system for generating fuel stocks in a fabricated biocolumn according to claim 4, LED fixtures that are mounted on distributing tubes that provide nutrient input in such a manner as to sweep the LED lenses and prevent growth buildup that would block the light, are used.

Claims:

1. A system for generating fuel stocks in a fabricated biocolumn comprising of assembled zones, each zone is fabricated by stacking a plurality of prefabricated modules,

   Inputting a nutrient, a renewable energy source, photon energy and a carbon source into said zones and outputting fuel stock and by products from zones;

   wherein zones are interconnected so that byproducts from each zone can be separated, recirculated, sold and converted to products..

2. The system for generating fuel stocks in a fabricated biocolumn according to claim 1, wherein each module can further be divided into submodules.

3. The system for generating fuel stocks in a fabricated biocolumn according to claim 2, wherein submodules are assembled to fabricate a module.

4. The system for generating fuel stocks in a fabricated biocolumn according to claim 1, wherein photon energy is obtained from submerged LED.

5. The system for generating fuel stocks in a fabricated biocolumn according to claim 1, wherein said renewable energy source is a geothermal energy, a solar thermal energy, a photovoltaic energy, an external waste heat, a heat of internal reactions or combinations thereof.

6. The system for generating fuel stocks in a fabricated biocolumn according to claim 1, wherein said nutrient is selected from the group consisting of a geothermal fluid, an organic waste slurry biomass, a coal, a hydrocarbon and combinations thereof.

7. The system for generating fuel stocks in a fabricated biocolumn according to claim 1 or 6 wherein said nutrient is water containing.

8. The system for generating fuel stocks in a fabricated biocolumn according to claim 1, wherein said carbon source is selected from the group consisting of atmospheric air, a carbon dioxide source, an organic waste, a coal, a hydrocarbons, a geothermal fluid, an internal product of said consortium growth, propagation and reaction, and combinations thereof.

9. The system for generating fuel stocks in a fabricated biocolumn according to claim 1, wherein said modules are interconnected to function as a complete biocolumn.

10. The system for generating fuel stocks in a fabricated biocolumn according to claim 4, wherein LEDs operating at a fraction of the normal intensity of sunlight (approximately one-sixth) at just the level at which algae growth plateaus, before additional light intensity is wasted or actually inhibits additional growth, are used.

11. The system for generating fuel stocks in a fabricated biocolumn according to claim 4, LEDs that are pulse to allow the proximate algae to recover from the acceptance of a photon and be ready to receive another are used.

12. The system for generating fuel stocks in a fabricated biocolumn according to claim 4, LED fixtures that are mounted on distributing tubes that provide nutrient input in such a manner as to sweep the LED lenses and prevent growth buildup that would block the light, are used.