Claims:

1. A barge comprising renewable energy recourses comprising:

   a plurality of horizontal axis wind turbines;

   a plurality of photovoltaic panels;

   a plurality of sea-wave generators;

   a flotation system comprising a plurality of flotation pipes designed to accumulate fluid, wherein the pipes extends across the barge forming foundations;

   a plurality of pillars assembled on the foundations in rows along the barge, wherein each row comprises a plurality of pillars that support an array of turbines facing one direction;

   wherein the flotation system floats the barge by injecting gas to the pipes and semi-submerging the barge by either exhausting the gas or injecting seawater to the pipes;

   wherein energy harvested by the renewable energy recourses is transformed to electrical energy; and

   wherein the electrical energy is transmitted to a grid onshore.

2. The barge of Claim 1, wherein at least a portion of the electrical energy is stored in batteries.
3. The barge of Claim 1, wherein all the electrical energy is stored in batteries.
4. The barge of Claim 1, wherein at least a portion of the energy harvested by the renewable energy recourses is transformed to gas pressure to be stored in pressure accumulator.
5. The barge of Claim 1, wherein the energy harvested by the renewable energy recourses is transformed to gas pressure to be stored in pressure accumulator.
6. The barge of Claim 1, wherein at least a portion of the energy harvested by the renewable energy recourses is stored as gravitational potential energy by elevating loads and or substantially floating the barge.
7. The barge of Claim 1, wherein the energy harvested by the renewable energy recourses is stored as gravitational potential energy by elevating loads and or substantially float the barge.
8. The barge of Claim 1, wherein the plurality of flotation pipes, having a diameter of at least three meters, form a structure covered by a barge-deck.
9. The barge of Claim 1, wherein each row of pillars along the barge is enforced by a plurality of cables and crossbeams;
10. The barge of Claim 8, wherein the plurality of photovoltaic panels is installed in slight incline on the barge deck;

11. The barge of Claim 8, wherein the plurality of sea-wave generators is secured to below the barge deck and wherein buoys of the plurality of sea-wave generators floats on the seawater;
12. The barge of Claim 1, wherein the barge further comprises seawater desalination plant, and wherein water produced by the desalination plant is pumped to a tanker ship mooring by the barge.
13. The barge of Claim 12, wherein at least a portion of the electrical energy is utilized for operating the seawater desalination plant.
14. The barge of Claim 1, wherein the barge is relocatable by tag boats to locations selected from a group comprising of shipyards; a plurality of deep-sea harvesting locations; and a combination thereof.
15. The barge of Claim 1, wherein the barge is equipped with maneuvering capability for optimal orientation of the barge toward the wind in order to optimize the plurality of horizontal axis wind turbines yield.
16. The barge of Claim 1, wherein the barge is equipped with maneuvering capability for optimal orientation of the barge toward the sun in order to optimize the plurality of photovoltaic panels yield.
17. The barge of Claim 1, wherein the barge is equipped with maneuvering capability for optimal orientation of the barge in line with wave's direction in order to optimize the plurality sea-wave generators yield.
18. The barge of Claim 1, wherein the barge further comprises electrical structure, wherein the electrical structure comprises:

power grid utilized to aggregate alternating current (AC) electrical energy from all resources;

step-up transformers for shaping the aggregated AC for transmission;

a plurality of batteries configured to store energy;

inverters for altering energy stored in batteries to AC;

rectifiers configured to alter AC for storage in the batteries;

a computerized control system (CCS) configured to monitor and control renewable energy recourses; and

an input/output interface configured to transmit and/or receive information and instructions between the CCS and elements selected from a group comprising: devices, actuators and sensors; global positioning system; programmable logic controllers; temperature sensors; humidity sensors; wind speed and direction

sensors; wave sensors; RADAR; water depth gauge; radio communication; the Internet; and a combination thereof.

19. The barge of Claim 18, wherein the CCS is further configured to monitor and control the transmission to the shore based on shore demand, and directing excessive energy for storage.
20. The barge of Claim 18, wherein the CCS is further configured to enable remote control and monitoring via the Internet.
21. A fleet comprising a plurality of barges located in deep waters, wherein each barge of the plurality of barges is the barge of Claim 1; wherein each barge is connected by at least one branch to power transmission lines; and wherein the power transmission lines aggregates electrical energy of the plurality of barges for transmission from the fleet location to a grid onshore.