Differences between conventional shipping and Wentainer system

Usage of electricity for transportation of cargo in water is not a practical case. However, in few ships solar energy is used even though it faces lot of issues like the requirement of area to produce enough energy for powering engine (For a ship of size 397m length and 56m width (22,232sq m) the energy produced is about 1 MW however the engine power of the machine is around 81MW). The produced energy is currently stored in Battery therefore there is also a requirement of Battery room, also increasing the curb weight. Thus, it is not possible to completely remove fossil fuel from a conventional boat/ship which causes too much pollution and also playing a major part in the vessel’s curb weight.

In the case of Wentainer system solar panels are employed on top of the rail structure in a large scale which can be used to power the wentainer system and rest of the energy can be fed back to the grid (for a rail structure of length 3.5 Km solar panel can produce one Mega watt of energy (3500m x 6 m width) can be produced).Wentainer needs only a small percentage of energy produced by the solar panel to run (Wenatiner’s engine power is less than 50HP).When ever the solar energy produced is low wentainer can tap energy from the grid to operate. As a result, direct and indirect pollution due to transportation can be reduced while also reducing the cost of transportation.

For transportation of cargo in inland waterways by means of a conventional boat there is a requirement of large width and air draft. For a conventional boat to move through inland waterways the allocation of area and fabrication of structure for the solar panel is costly. However, wenatiner system uses small water draft (2m) air draft (3.5 m) and width (6 m) to move cargo at a large scale. This small water draft , air draft and air draft makes it possible to construct rail structure at a lower cost. Since there is already a structure to place solar panel there is no need to construct it .