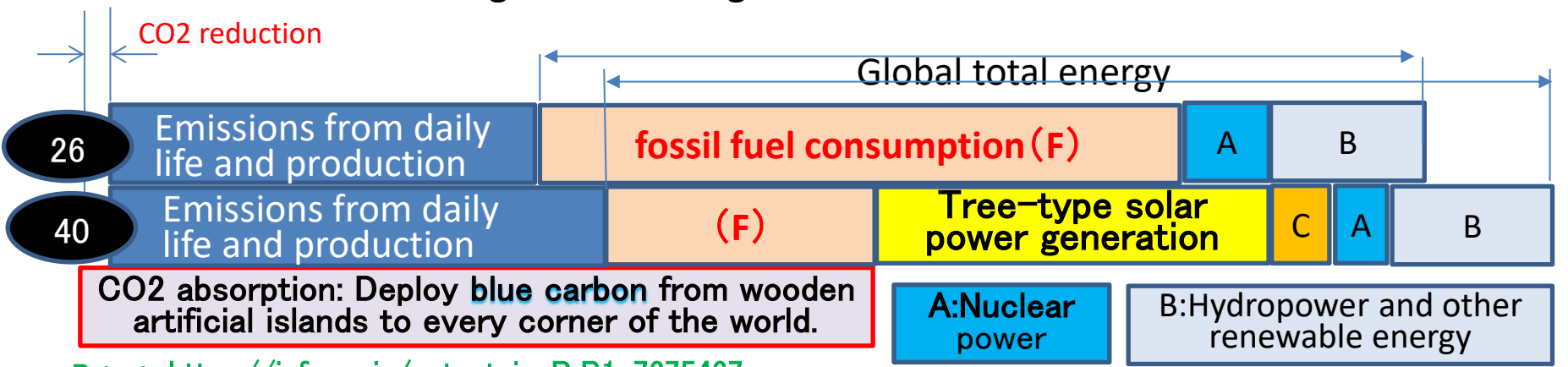


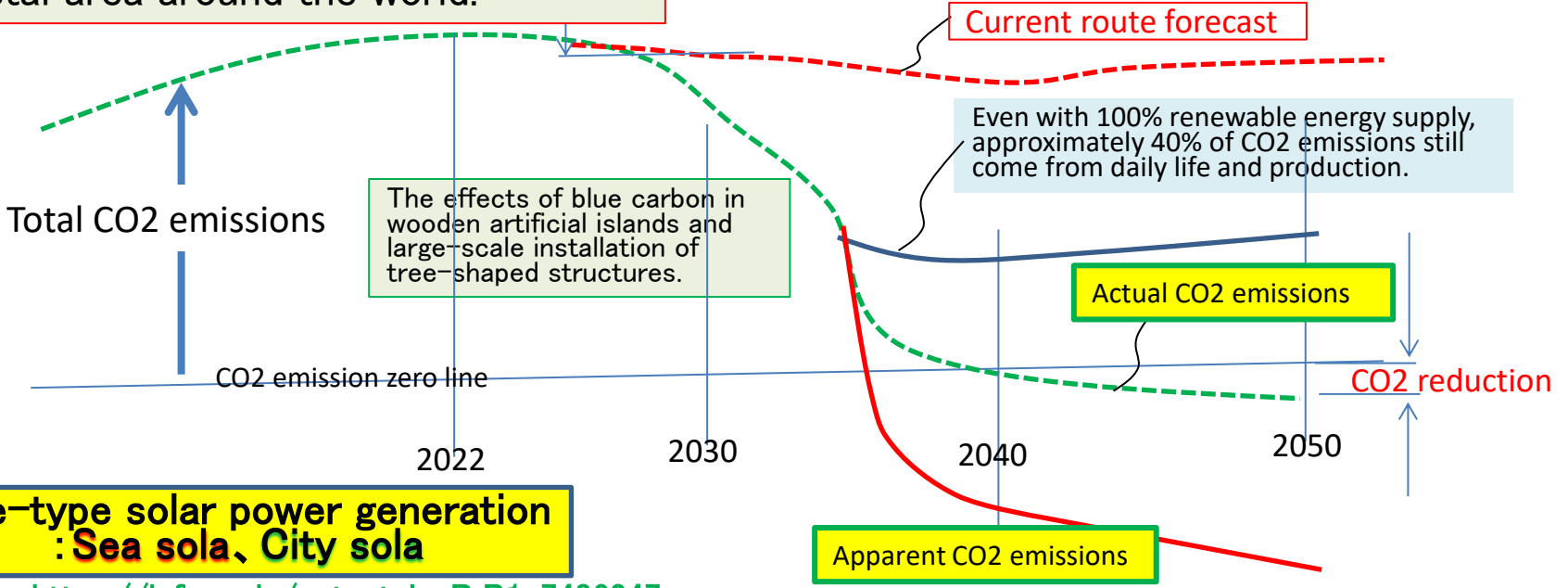
<The image is of net-negative CO2 emissions around 2040.>



Japan, the United States, and Europe will take the lead, seeking cooperation from neighboring countries, and will install these facilities in every possible coastal area around the world.

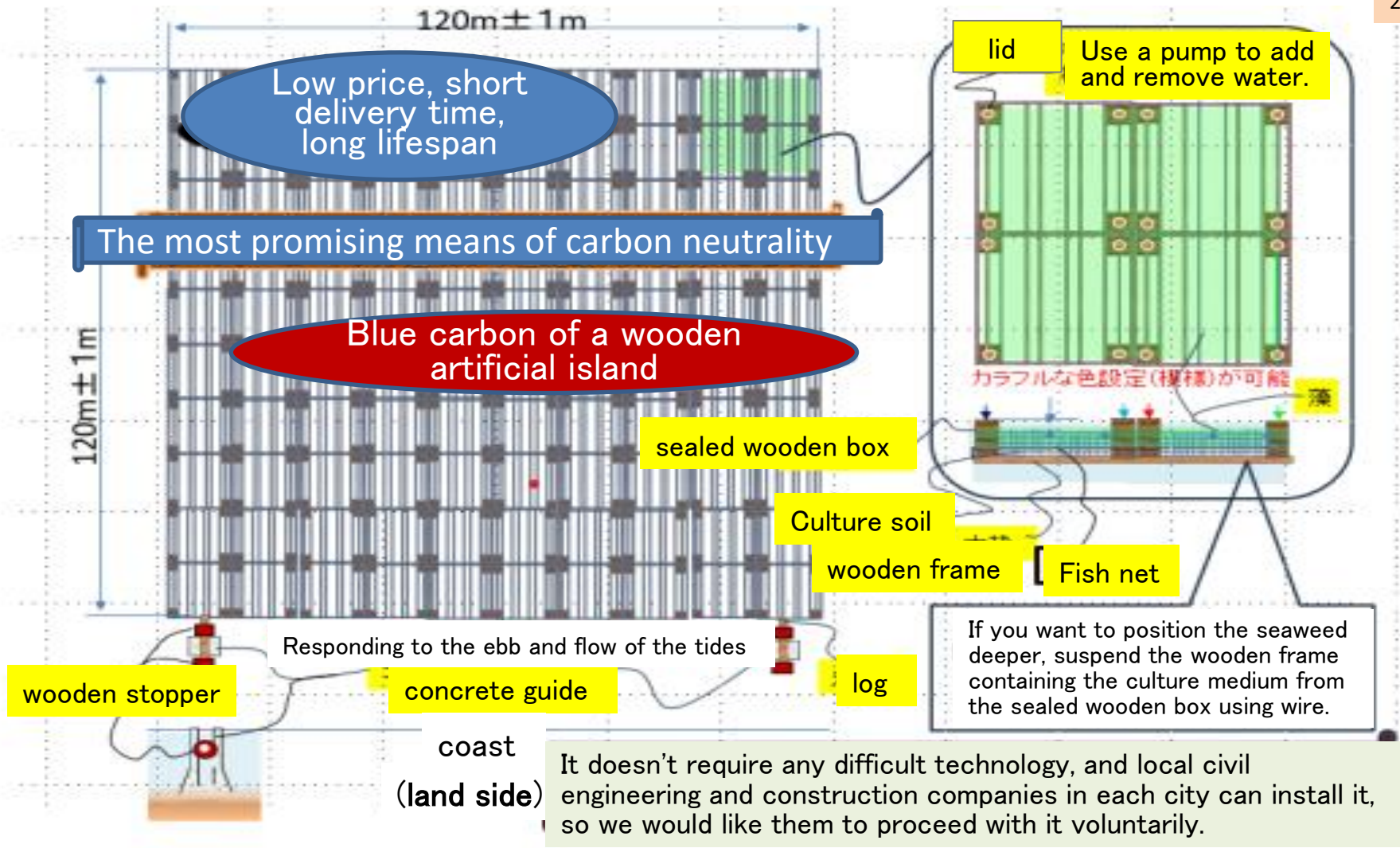
C: Water turbine power generation using pools set up in rivers (a future main source of renewable energy)

Patent: https://ipforce.jp/patent-jp-P_B1-7199129



Tree-type solar power generation
: **Sea sola, City sola**

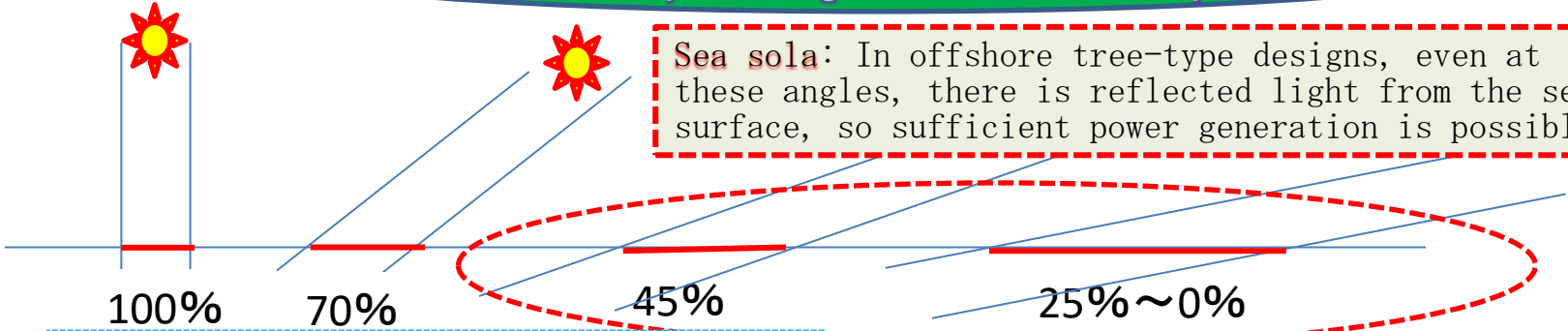
Patent: https://ipforce.jp/patent-jp-P_B1-7486247



A wooden frame is constructed, a sheet is laid on top, and culture medium for algae cultivation is placed on top. Four sealed wooden boxes are then set up around the perimeter to maintain buoyancy. Furthermore, hatches are installed on the top of the sealed wooden boxes, and a pump can be secured to them. The depth is adjusted by pumping in and out seawater, positioning the box to maximize photosynthesis efficiency.

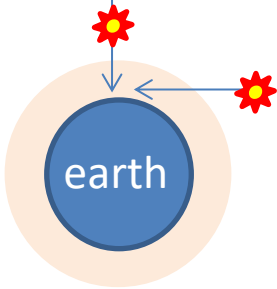
We use domestically produced panels because they offer high added value as a system.

Sea sola: In offshore tree-type designs, even at these angles, there is reflected light from the sea surface, so sufficient power generation is possible.



Degree of decrease in power generation due to incidence angle, assuming vertical entry is 100%.

For housing complexes **Sea sola** Industrial Commercial



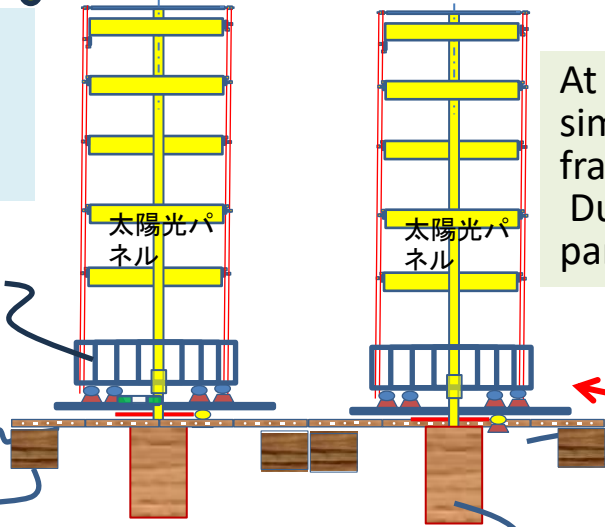
AI solar automatic tracking wooden artificial island

Offshore lake-mounted tree-type solar power generation system

At sea, both total internal reflection and diffuse reflection are received, so solar panels are installed on both sides.

Storage box (AI determines when to lower and store the panel during strong winds at night)

At sea, it requires no foundation; it simply needs to be fixed to the wooden frame of a wooden artificial island. During strong winds or at night, all panels can be lowered and stored.



Diffuse reflected light

Totally reflected light

Maintaining it for a thousand years with regular maintenance.

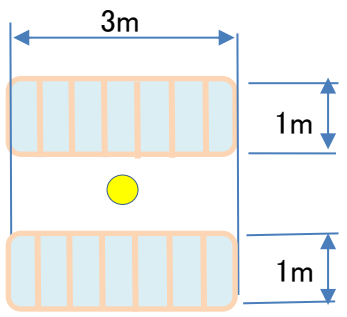
Airtight wooden box (Liquid glass coating)

Wooden bearing holder (Liquid glass coating)

Home-use tree-type solar power generation system

City sola

Floor plan



Strong against snow, strong winds, sandstorms, and earthquakes; easy to install and remove; can be installed very close to home; easy to clean and maintain; no environmental damage.

Designed for relatively high-latitude regions such as Ukraine: enough for 3-5 houses

Total panel area: $3\text{ m}^2 \times 10 = 30\text{ m}^2$ (5 panels in the front and 5 in the back,)

Thin panel & lightweight wooden frame

The wooden frame has rounded corners to prevent it from being blown away by strong winds and causing serious injury if it hits someone.

Power generation at a higher elevation than a typical house, and safe storage at a lower elevation than the roof.

The lower space can be effectively used as a parking lot, field, flower bed, garden, or pathway.

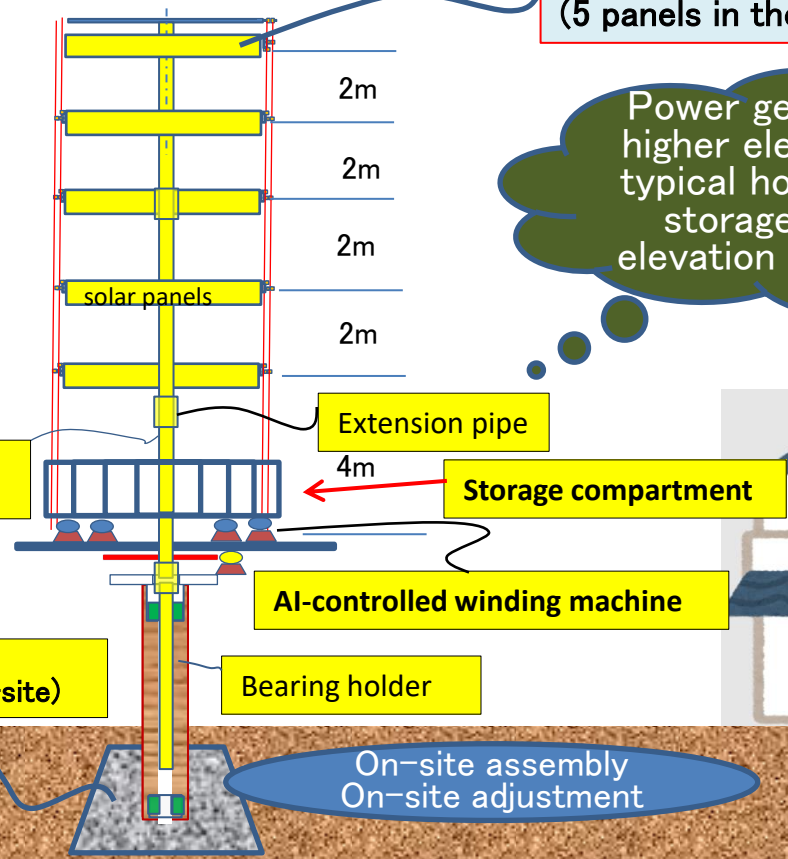


Image of the house (Size comparison)



Effective as aid to Ukraine's reconstruction. (Most power plants were destroyed in the Russian attack.)

Even if a major earthquake causes power outages and water supply disruptions, by transporting materials by helicopter and assembling them on-site, drinking water and electricity can be restored in about half a day.

Recommended ancillary equipment includes AI-equipped PCs, surveillance cameras, storage batteries, generators for handling prolonged rain or equipment failures, and an "air-water system" for drinking water.

A smartphone app enables manual operation and is used during maintenance and cleaning. (You climb up to the storage area using a ladder.)