RED SUN MSR

- Molten salt reactor (MSR) (chlorine salt 550 -600 C) vs (fluorine salts 800 C)

The fourth generation of the MSR works at atmospheric pressures vs the light water reactors such as the one built at the bataan plant, operates at 3000 psi, requiring 3000 times larger containment domes to prevent the escaping steam from spreading radioactive contamination.

- MSR uses liquid salt fuel and operates on Thorium. Burn 99 % of the fuel vs the light water reactor which burns half of 1%, discarding the remaining fuel after only a few years. The light water reactor makes plutonium and other highly radioactive materials, that are radioactive for 300 000 years. This in comparison to MSR material which is only radioactive for 300 years, and only produces 100 kg of waste material per GW. Which is 200 times less than the light water reactor.
- The cost of the electricity with the MSR is only 3 cents/kWh.
- Almost every mine in the Philippines has Thorium as biproduct and therefore no fuel needs to be imported and no waste exported.
- The MSR is extremely safe because the fuel is imbedded in the Thorium salt and will not dissociate. The experimental Thorium breather reactors have a combined running time of 400 years including 10 years at Oak Ridge National Laboratory in Tennessee. https://www.ornl.gov/
- The cost of building a MSR is only US $ 1000 per installed kW
- Mobile Molten Nickle thermal battery (2000 kWh per kg) vs

- ***PowerSource 3.2 MW – 1.6 tons***

  Stationary Molten salt battery (150 Wh per kg) vs
  Mobile Tesla battery (270 Wh per kg)
- National Nickle industry into a National Nickle battery industry
- We want to create a value added nickle battery Energy Industry in the Philippines
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- ***Infrared Solar Power dish (1700 C) Infrared Solar trough (1100 C)***

- ***Desalination Separate self-contained mini desalination plants allow distributed water to each point or port Greatly lowers energy and pumping costs & movable & temp.***
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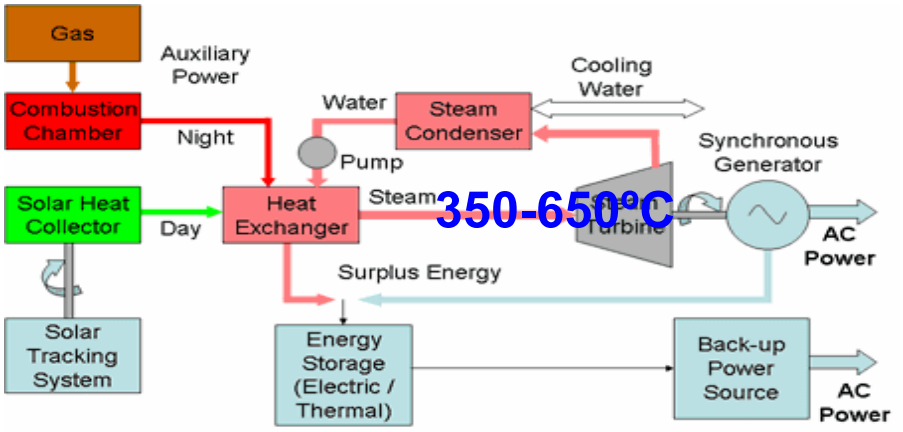
- ***High Efficiency Turbines with better than 60% efficiency***
- The heat of the Red Sun MSR and IR solar produce significantly lower cost Ice production, so that we can offer the fisheries industry half price ICE at $250 per ton.
- Low cost refrigeration for the agricultural and mariculture rural exports.
- ***4,000 m2 Refrigeration plant plus Ice Plant***
  Franchise can payback power plants quickly - 350,000t/ year /Pack Ice



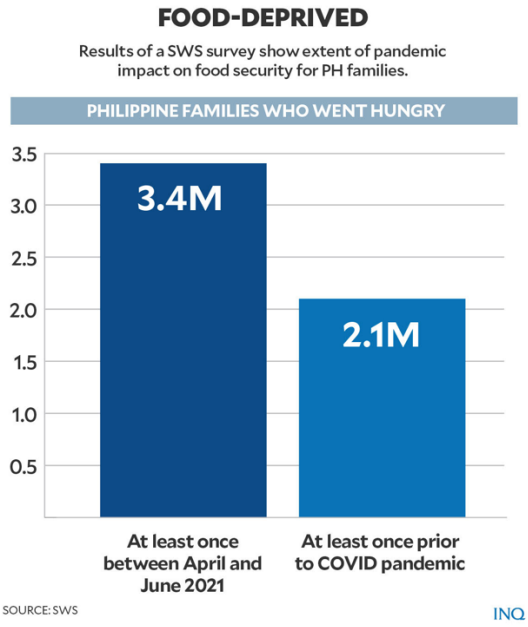
Large Scale Electric Power from Solar Thermal Energy

British Atmospheric Data Centre
NATIONAL CENTRE FOR ATMOSPHERIC SCIENCE
NATURAL ENVIRONMENT RESEARCH COUNCIL

Verified by BADC (British Atmospheric Data Center)
Red Sun MSR is built to make 3 cents/kWh

Bunker C price 2023 February is $600 US.
Weight of Bunker C = 0.95 kg per liter.
https://shipandbunker.com/prices/apac/sea/sg-sin-singapore
6724 gals/hour x 3.785 x 0.6 = US $15 270 per hour. Outside 2 mile harbor limit

Low Sulphur Diesel cost is US $1.134 per liter. Inside 2 mile harbor limit
6724 gals/hour x 3.785 x 1.134 = US $28 860 (PH pesos 1 587 337)



- https://newsinfo.inquirer.net/files/2021/10/food-deprived.png

- **<u>Utility prices</u>**

AC –9 cents/kWh
Heat 7 cents/kWh
Water –1 cents/litre
Ice –25 cents / kg
1000ºC Steam 9 cents /kWh
Refrigeration Service

The value-added proposition, through the infrared and MSR will be able to create significantly more desalinated water.

High tech forced evaporation system and carbon fiber technologies we create multiples of the normal, so that small 25 m2 desalination units creates 3 million liters per day

Organic Rankine cycle – special refrigerant

Navy RED SUN MSR Program

- Proposing a JV with the Navy where the Navy get 8’% of the revenue from the RED SUN MSR Installations on each vessel. The Navy delivers the RED SUN Batteries to various places.
- The Navy leases RED SUN MSR the land, builds and ships for MSR construction.
- Cooperates in the collection, processing and energy creation from algae and biomass leading to syngas/hydrogen production and energy creation.
- The JV will create RED SUN retro fitted ships that run without fuel, at 3 cents per kWh enabling the Navy to affordable patrol Philippine national waters.
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