

## **How can I kick-start my factory to help the global economy after COVID-19?**

Do you know that REHOS Product Designs can guide, help and license you to manufacture game-changing RAP-Generators in South Africa, for users demanding modular, low-cost waste heat powered electricity generators, in the smaller kWe, as well as utility MWe size range for the global market?

### **What is it?**

The RAP-Generator is a containerized heat recovery power generator, operating on the patented REHOS thermodynamic cycle. The heatpump front end allow heat extraction from the environment at temperatures even below ambient for converting to electricity. It also render heat-to-power conversion efficiencies independent of input heat temperature levels, and can deliver electrical power with very high conversion efficiency. When using waste heat at temperatures below 100°C, this is at least twice the efficiency of conventional ORC's! Game-changing technology that would disrupt electricity production traditions all over the world, while becoming the main tool for mitigation of global warming.

### **What costs would likely apply from a mass production factory?**

Ballpark budgetary cost calc's point to RAP-Generator units < 50 kWe to sell at 2000 \$/kWe, while for larger utility-scale units > 1 MWe, costs would likely drop to < 1000 \$/kWe.

### **Where can I get more info about this?**

Visit REHOS Product Designs's website <http://www.heatrecovery.co.za> and contact the MD to email you some of the papers written on the subject, listed on the site.

### **Where are RAP-Generators likely to be used first?**

Smaller units of a few kWe are bound to be highly in demand as they produce electricity without the need of a costly fuel. For households primary energy would be extracted from the environment, via swimming pools, nearby water pools, dams and rivers.

Pump suppliers would use it to power their pumps using the thermal energy in the water to be pumped, revolutionizing agricultural irrigation, mine pumping etc.

Larger units are likely to be in high demand by electrical project developers that would install it as diesel generation replacements and phased decarbonization of utility scale fossil combustion power stations to generate additional power from the cooling water circuits of existing rankine cycles. This not only decrease the P/S carbon footprint, but also allow lowering of electricity price for the utility due to the low cost generation replacement without the addition of fuel!

Due to low cost, utilization of environmental thermal energy, modular, scalable and exceptionally high efficiency, RAP-Generators would gradually replace all fossil power generation, also power packs in marine, aero- and road/rail transport, and demand for this product would only grow as knowledge of it spread across the globe.....

**Uses of these power packs are only limited by our own limited imagination....**