# co2-waste-heat-to-energy-cooling-and-hydraulic-power-from-infinity-turbine

608-238-6001  [ TEL ]

greg@infinityturbine.com  [ Email ]

**Infinity Turbine LLC**

**CO2 Waste Heat to Power System 30C**

**This webpage QR code**

## Structured Data

```
<script type= "application/ld+json">
{"@context":"http://schema.org",
"@graph":[
{
"@type" : "Organization",
"@id" : "https://infinityturbine.com/#organization",
"name" : "Infinity Turbine LLC",
"url" : "https://infinityturbine.com",
"sameAs":
["https://www.youtube.com/channel/UCsobpvy0xqc13uvhA71Cv4w",
"https://x.com/InfinityTurbine",
"https://www.instagram.com/infinityturbine/"],
"telephone" : "608-238-6001",
"email" : "greg@infinityturbine.com",
"logo" : "https://infinityturbine.com/logo.png"
},
{
"@type":"WebSite",
"@id":"https://infinityturbine.com",
"url":"https://infinityturbine.com",
"name":"CO2 Waste Heat to Power System 30C",
"description":"Company Name: Infinity Turbine LLCProduct: Waste Heat to Energy Systems and
Technology using CO2Working Fluid: CO2Machine: ORC and ROT Radial Outflow Turbine
SystemIndustry: EnergyApplications: Waste heat to power, utilities, server farms, bitcoin mining, hot
geothermalHigh Technology Uses: Converting waste heat to power starting at 30C.Machine
Features: One moving part and solid state turbine technology. Machine Runs On:  liquid CO2.Other
Technology: Tribo effect power, hydrodynamic cavitation hot water power and extraction. Modular
block technology. Gas leverage turbine for production of fuels from liquid CO2."
}
,{
"@type":"NewsArticle",
"mainEntityOfPage":{
"@type":"WebPage",
"@id":"https://infinityturbine.com/co2-waste-heat-to-energy-cooling-and-hydraulic-power-from-
infinity-turbine.html"},
"headline":"CO2 Waste Heat to Power System 30C",
"image":"https://infinityturbine.com/images/20181105-infinity-turbine-3d-co2-turbine-parts-metal-
exone-01.jpg",
"datePublished":"2024-04-15T08:00:00+08:00",
"dateModified":"2024-04-15T09:20:00+08:00",
"author":{
"@type":"Organization",
"name":"Infinity Turbine LLC",
"url":"https://infinityturbine.com"
},
"publisher":{
"@type":"Organization",
"name":"Infinity Turbine LLC",
"logo":{
"@type":"ImageObject",
"url":"https://infinityturbine.com/logo.png"
}}}

]}</script>
```

Company Name: Infinity Turbine LLC
Product: Waste Heat to Energy Systems and Technology using CO2
Working Fluid: CO2
Machine: ORC and ROT Radial Outflow Turbine System
Industry: Energy
Applications: Waste heat to power, utilities, server farms, bitcoin mining, hot geothermal
High Technology Uses: Converting waste heat to power starting at 30C.
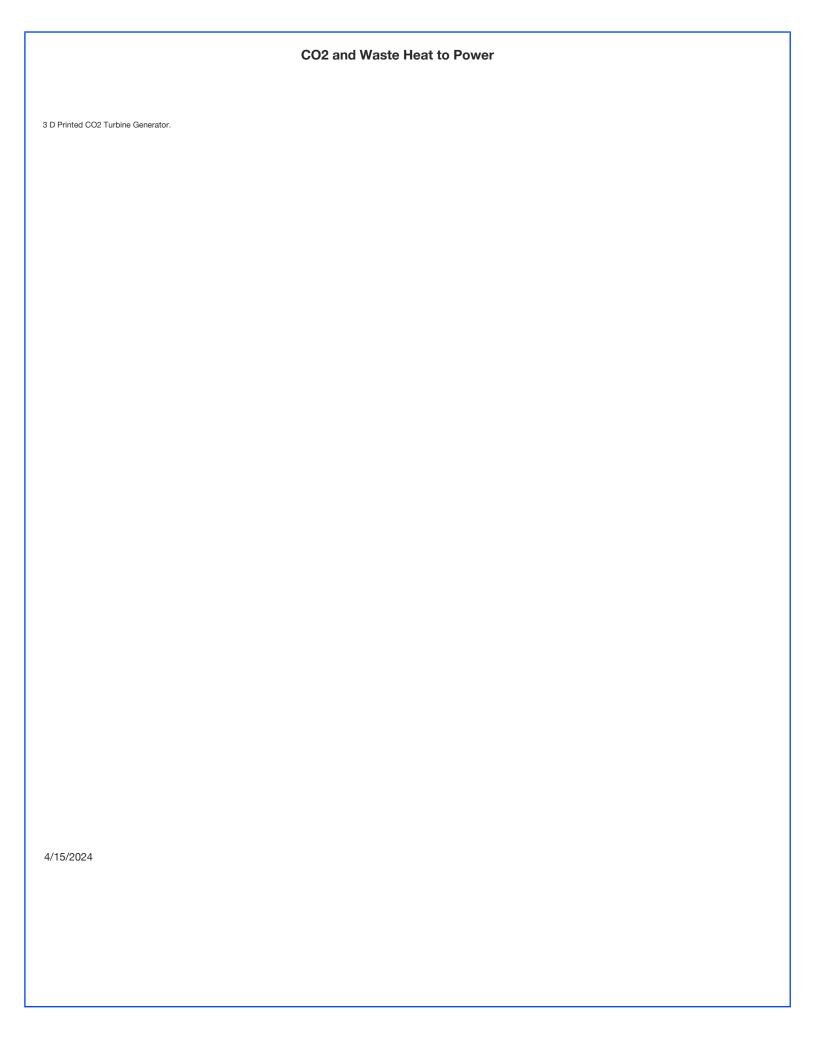Machine Features: One moving part and solid state turbine technology.
Machine Runs On:  liquid CO2.
Other Technology: Tribo effect power, hydrodynamic cavitation hot water power and extraction. Modular block technology. Gas leverage turbine for production of fuels from liquid CO2.

## PDF Version of the webpage (first pages)

https://infinityturbine.com/co2-waste-heat-to-energy-cooling-and-hydraulic-power-from-infinity-turbine.html

3 D Printed CO2 Turbine Generator.

4/15/2024

# Introducing the Infinity Turbine Supercritical CO2 Phase Change Demonstrator

Phase Change Generator · Electrostatics Generator Using Tribo-Tube · Ion Generator · SWET

 Now Available for Educational and Inventors

Testing and Development Platform

Price: Call or email for pricing.

 Available as a prototype testing platform, Infinity has developed a micro-sized Supercritical CO2 Rankine Cycle (phase change flow cycle). The high pressure filter housing (off-the-shelf) used as the expander vessel, can also be used with various catalysts (Lithium), plastics (TriboGen), or a combination of a turbine and static electricity harvesting system. Our hybrid food-grade plastic elements can also be used for electrostatic precipitation (ESP), if you have particulates entrained in the gas flow. This is to demonstrate the potential of the Supercritical CO2 Rankine Cycle as a point-of-use distributed power generation technology using low grade heat via CO2. This includes waste heat from computer server farms, solar thermal, etc.

This unit can use heat as low as 89F to phase change liquid CO2 to vapor, then pressure drop to generate large voltages and ions over a hybrid plastic.

Recent developments in solid state wind generators see:

A solid-state wind-energy transformer

A Solid-state Wind-Energy Transformer (SWET), uses coronal discharge to create negative air ions, which the wind carries away from the SWET. The SWET harnesses the wind-induced currents and voltages to produce electrical power.

The generation of airflows by ionic currents, electrohydrodynamics, is well studied and has numerous applications,[1] even including airplane flight.[2] The reverse process, using airflows to create ionic currents, has received much less attention. Until now, no one has generated net electrical power with wind-driven ionic currents. The barrier for producing electrical power by this process is the high mobility of air ions: the mobility problem. Electric fields pull the ions through the neutral air, creating drift currents that tend to short-out the voltages generated by the wind-driven currents. This mobility problem can be overcome if the apparatus is designed such that the electric fields are sufficiently weak so that the wind largely controls the ion motion.

4/15/2024

4/15/2024

4/15/2024

4/15/2024

4/15/2024

4/15/2024