



Bringing Technology To Life

www.vivifyinc.com
800-559-8090

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SOLVING THE WORLDS ENERGY CHALLENGES

Vivify is tackling the largest energy challenges facing the world with a brand new perspective. By combining forward thinking technology with cutting edge science & engineering, we create paradigm shifting clean energy solutions.



CLEAN AIR TECHNOLOGY

The next generation of carbon capture and emissions control called Clean Air Technology is a revolutionary technology that allows power plants to achieve zero emissions while producing low cost electricity - providing affordable green energy.

CLEAN AIR TECHNOLOGY + ALASKAN COAL POWER PLANTS = THE RIGHT CHOICE FOR ALASKA

- ✓ Utilize Alaska's vast natural coal resources.
- ✓ Provide low cost electricity to the people of Alaska.
- ✓ Enable Alaska to create thousands of high quality jobs.
- ✓ Protect Alaska's pristine environment and natural eco-system.

CLEAN AIR TECHNOLOGY PROTECTS ALASKA'S PRISTINE NATURAL ENVIRONMENT

OUR CLEAN AIR TECHNOLOGY provides complete pollution control and carbon capture for coal fired, diesel and natural gas power plants, removing 100% of pollutants from exhaust emissions, exceeding ambient air quality - achieved by unique patented processes of super-heating hydrogen to vaporize volatile organic compounds, and capturing carbon dioxide and other air compounds via super-cooling methods.



Carbon Dioxide (CO₂)



Nitrogen Oxide (NO_x)



Sulfur Dioxide (SO₂)



Carbon Monoxide (CO)

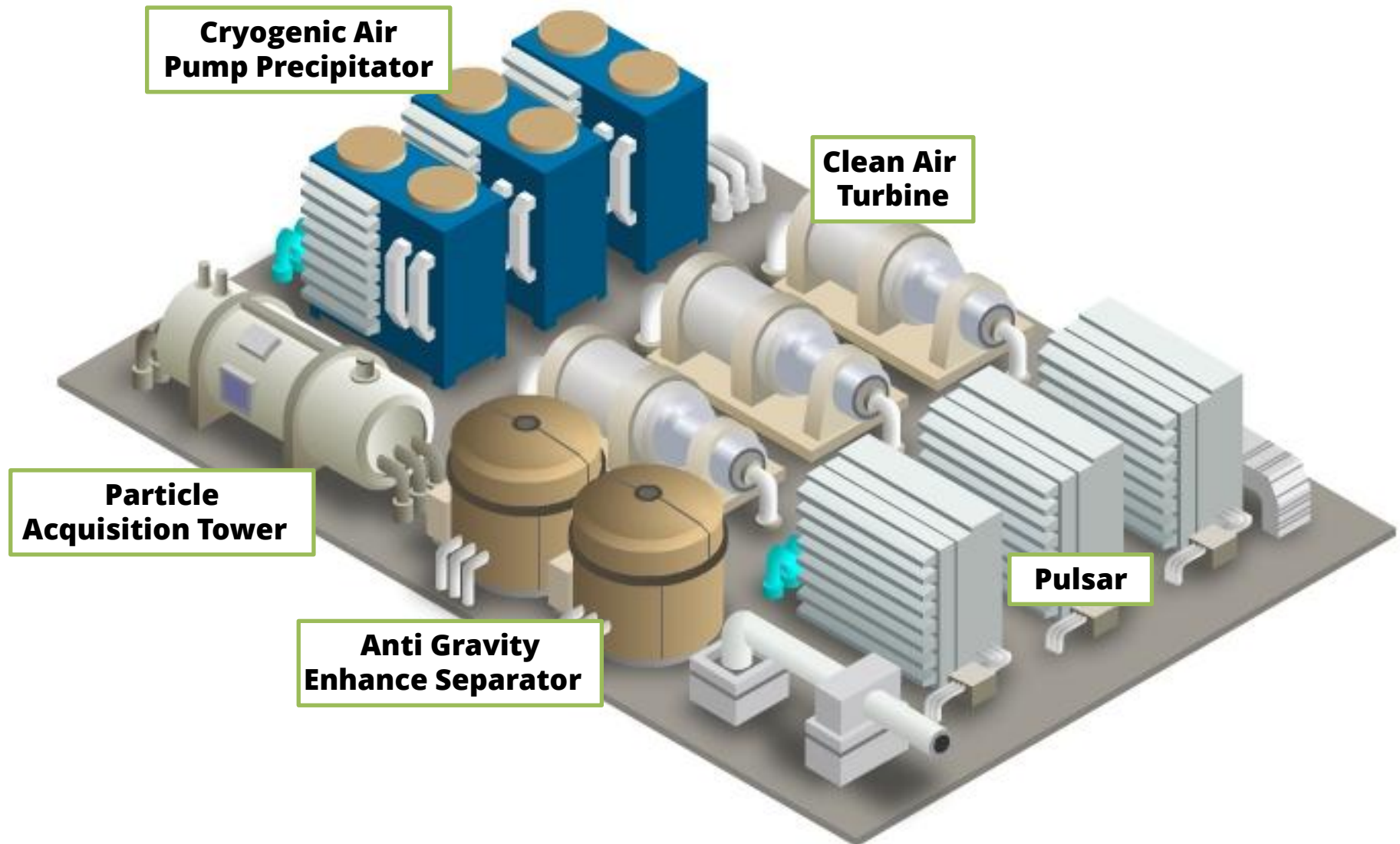


Mercury & Arsenic

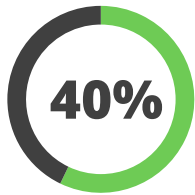


Sulfur Dioxide (SO₂)

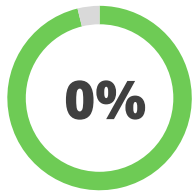
Vivify Clean Air Technology



PROVIDE LOW COST ELECTRICITY TO THE PEOPLE OF ALASKA.



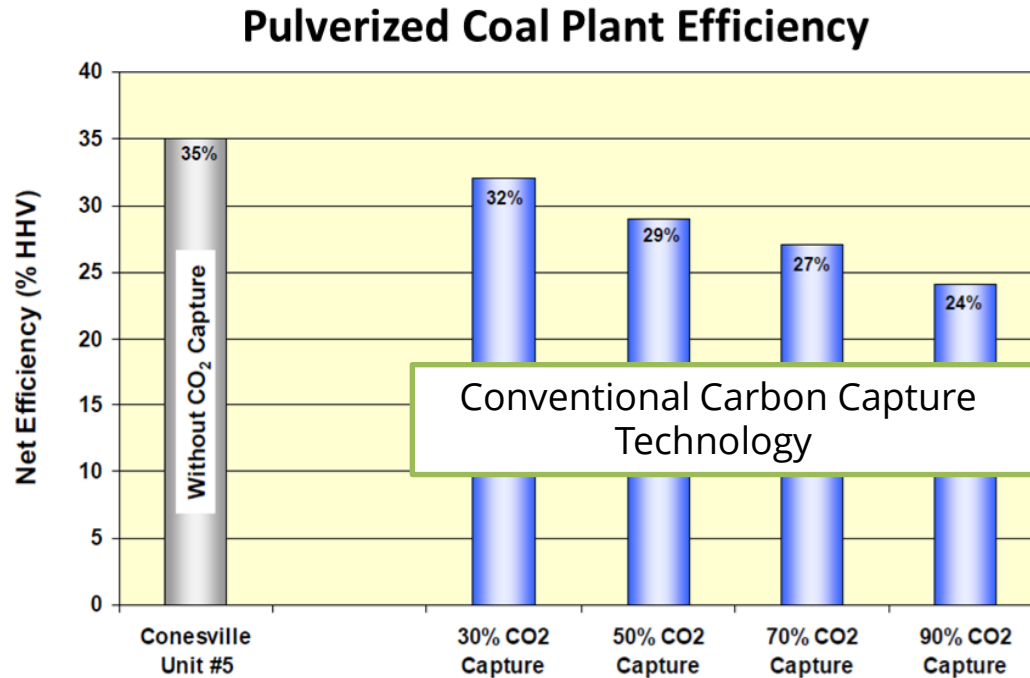
CONVENTIONAL POLLUTION CONTROL and carbon capture technology uses 30%-40% of a power plants energy capacity, which increases the cost of electricity to the consumer by a staggering 130%-140%.



CLEAN AIR TECHNOLOGY generates its own electricity, increasing a power plants capacity and dramatically lowering the cost of electricity as compared to convention pollution control systems. Vivify's Pulsar, an exclusive patented on-demand hydrogen creation solution, powers the entire pollution control and carbon capture process.

Note: 0.001% of a plants capacity maybe required for ancillary processes - estimated 2000 watts connection.

Zero Parasitic Load



Reference: CO₂ Capture From Existing Coal-Fired Power Plants, U.S. Department of Energy/National Energy Technology Laboratory, Revised Final Report, November 2007.

Vivify Clean Air Technology has zero parasitic load does not reduce the net efficiency of the plant, keeping electricity costs low.

REDUCE THE COST OF POLLUTION CONTROL & CARBON CAPTURE

- 💰 Clean Air Technology costs dramatically less than inefficient conventional pollution control and carbon capture technology.
- 💡 Clean Air Technology can be implemented in new power plant construction or integrated into existing power plants or even retired plants.
- 💰 Does not require costly absorbents or chemicals. Can be implemented with zero downtime or retrofit required, utilizes the plant existing infrastructure. Clean Air Technology does not impede the current plant operations.

Clean Air Turbine

- Vivify uses a series of turbines, compressors and generators in the operation of our technology.
- By utilizing the heat from the flue exhaust, coupled with pressure, we generate additional heat to power the generators, we create electricity to offset the operating and maintenance cost.
- We employ heat exchangers to extract the heat and precipitate the contaminants from the pressurized gas
- The captured Carbon Monoxide (CO) and Volatile Organic Compounds (VOCs) are combusted to generate additional electricity.
- The simplicity of our technology is the answer to a cost-effective advanced complete Emissions Control and Carbon Capture Solution

Vivify Cryogenic Air Pump Precipitator

- Cryogenic chamber and pump used to separate air compounds.
- Leverage pressure and temperature (cryogenic) to separate, precipitate and capture gases.
- Separate Carbon Dioxide (CO₂), Sulfur Dioxide (SO₂), Nitrogen Oxide (NO_x) and Mercury Compounds (Hg) - as required.
- Each Compound will precipitate at its own ideal temperature and pressure within their own respective chambers.

Vivify Particle Acquisition Tower

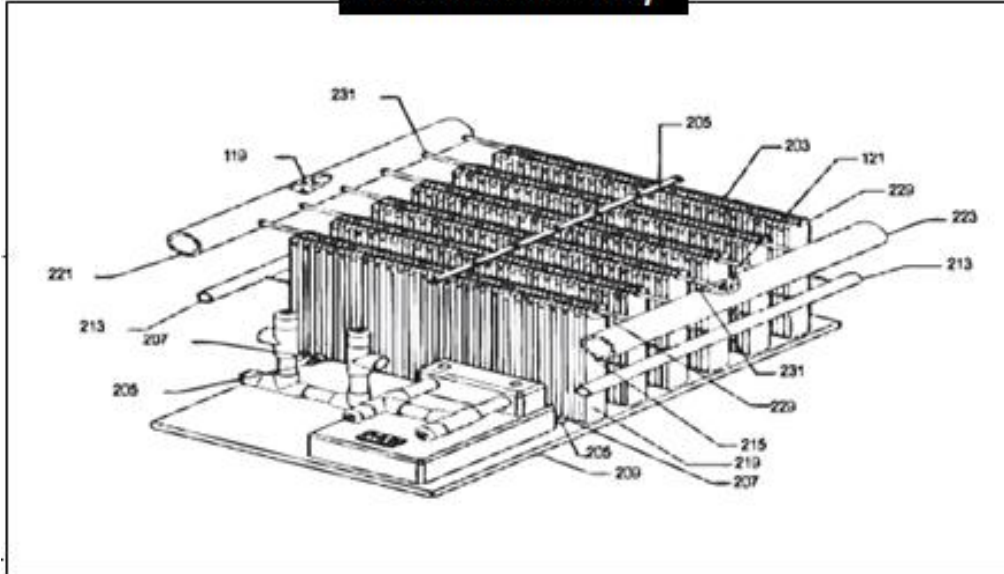
- Water Filled Hydroponic towers in which exhaust mixes with water to remove heavy particulates.
- Heavy particulates condense and separate as it is filtered at high pressure.
- Works in conjunction with Anti Gravity Enhance Separator to filter heavy and light particulates.
- Utilized based on current power plant configuration. May not be needed with new power generating technology.

Vivify Anti Gravity Enhance Separator

- Removes fine particulates, including Mercury (if not being separated in Cryogenic chamber).
- Rotating chamber users centrifugal force to separate particles by weight.
- Used in conjunction with Particle Acquisition Tower to filter heavy and light particulates.
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Vivify Pulsar

300 Cell Pulsar™ Array



100 cell array can produce 1 cubic ft of hydrogen per hour with an input of 200 watts of electricity. Cells can be combined in any number to produce the desired amount of hydrogen.

- On demand hydrogen generation which provides a low cost, high yield fuel source.
- Water electrolysis produces hydrogen and oxygen .
- Concept developed in mid-1800s, but very inefficient and expensive - until now.
- Vivify Pulsar's patented technology is dramatically more efficient than historical electrolysis hydrogen generation.

Vivify Clean Air Technology

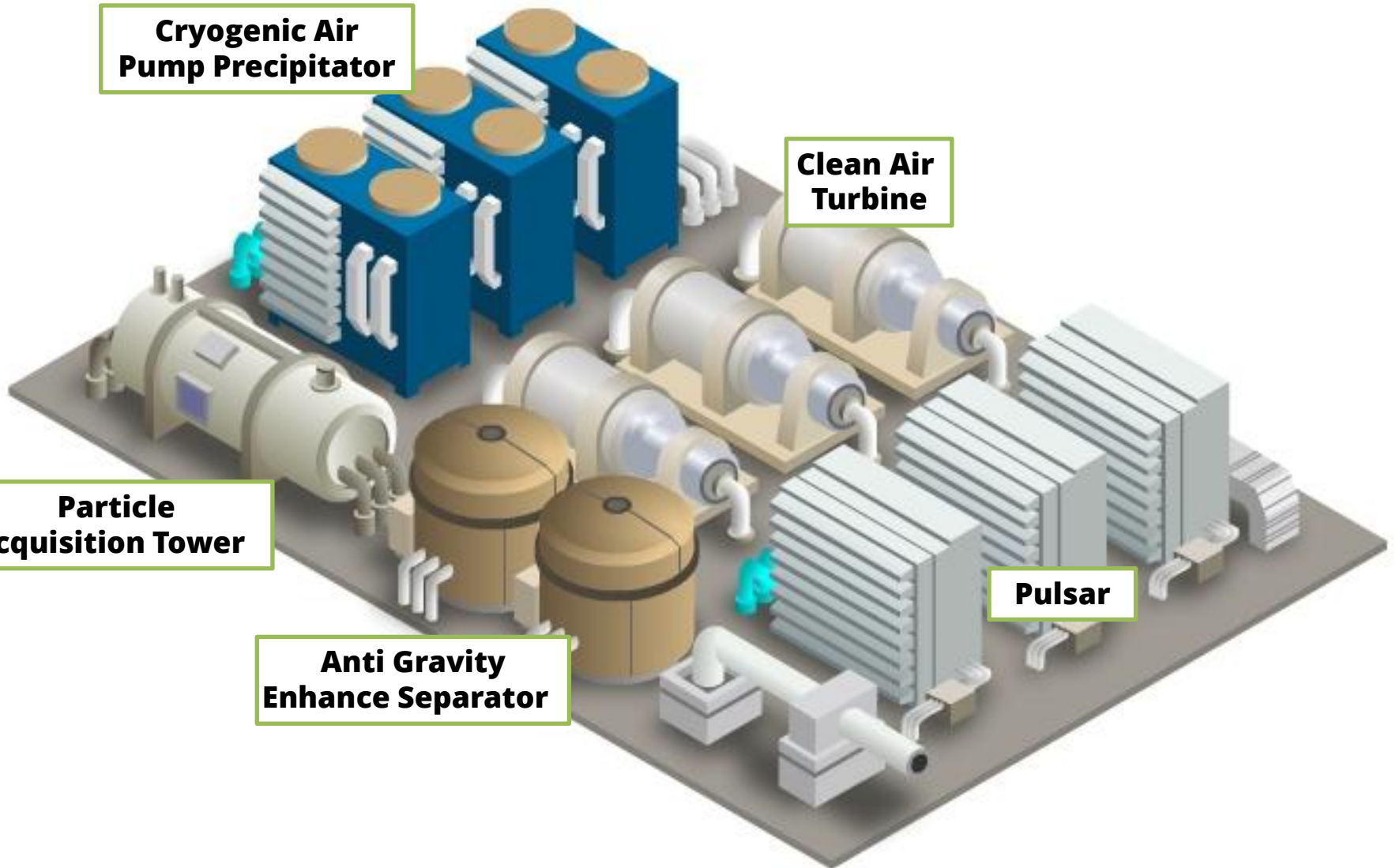
**Cryogenic Air
Pump Precipitator**

**Clean Air
Turbine**

**Particle
Acquisition Tower**

**Anti Gravity
Enhance Separator**

Pulsar





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