

# Heat Recovery Steam Generator Pays for Electric Generator and Itself in Less Than 8 Years!

## Take a prime power generator, install a Cain Industries HRSG and great things happen...

Let's start with a new 1000kW generator at a cost of \$1,200,000. Now we're going to place a Cain ESG1 heat recovery steam generator into the exhaust stream at a cost of \$169K. With a conservative fuel cost of 65¢ per therm and 8,000 annual operating hours our HRSG is going to produce \$182K of steam from recovered heat energy per year for approximately 20 years.

**Generator \$1.2MM + HRSG \$169K ÷ Recovered Energy \$182K = 7.5 Years Payback**

Here's the heat recovery science behind it all:

### Combustion Source:

#### 1000kW Turbine Generator

Steam Demand Heat Sink

Waste Exhaust Temp.	561°F
SCFM	11,280
Fuel Type	Natural Gas
Fuel Cost per Therm	\$.65
Annual Operating Hours	8,000

### Cain Model Installed:

#### ESG1 Steam Generator

Operating Steam Pressure	15 psi
Final Exhaust Temp.	302°F
Boiler Horsepower	105
Equivalent Evaporation	3,608 lb/hr
Pressure Drop, Exhaust	1.44" WC
BTU/hr Recovered	3,500,000
BTU/hr Saved	3,500,000
Total Cost	\$169,255

### Life Expectancy Savings:

**\$3,640,500** (20 years)



Every exhaust heat recovery application is unique and will provide different payback results. Contact Cain Industries today to evaluate your specific requirements and to receive a **FREE Savings Analysis Study with Guaranteed Performance!**