

## What is CostGenCal

CostGenCal is software for estimating the generation cost of the power plant, even at the time of project initiation. The software is compatible for coal based, gas based and renewable energy based power plants.

### Features

It Provides

- Per unit Generation Cost calculation , levelized and with annual variation

The screenshot shows the 'Input Sheet 1' window with the following fields:

- Technology: Coal Based
- Primary Fuel Sour: Double Source
- Source 1: [ ]
- Source 2: [ ]
- Primary Fuel**
  - Source 1: Fuel Cost [ ] per 1000 Kg, Escalation [ ] % per Annum, Transport C [ ] per 1000 Kg, Escalation [ ] % per Annum, GCV [ ] kCal Per Kg, Parts in % [ ] %
  - Source 2: Fuel Cost [ ] per 1000 Kg, Escalation [ ] % per Annum, Transport C [ ] per 1000 Kg, Escalation [ ] % per Annum, GCV [ ] kCal Per Kg, Parts in % [ ] %
- Secondary Fuel**
  - Fuel Cost [ ] per 1000 L, Cost Escalation [ ] % per Annum, Fuel Consumption [ ] mL per kWh, Fuel GCV [ ] kCal Per Kg
- Fuel costs are at Commissioning Time
- Year for CoG [ ]
- Other Operational Costs [ ] per Unit Sentout
- Escalation [ ] % per Ye.

- Further breakup of costs, like Interest on capital, Return on Equity (RoE), Depreciation, O&M, interest on working capital (IWC), primary and secondary fuel costs etc., as per applicability

- Provision for putting other variable costs

- Graphical

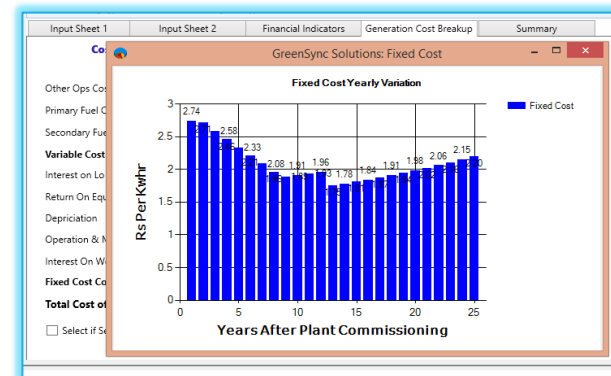
representation of all cost components and also of total cost, along the time line.

- For Coal based plants, option for two sources of primary fuel

- Option available for providing data of secondary fuel

- Option for accelerated depreciation

- Cost breakup variable and fixed costs



can be exported to excel (.csv format)

### System Requirements

OS: Windows 7. Windows 8 (Desktop)

.net Framework: 4

RAM: 512 MB

Disk Space: 1 GB

IE: version 10.x and above

Display: 1024 x 768 (Min)

- Calculate Bid Evaluation Factor and Liquidated Damage (BEF and LD)
- Time series of cost components

- Input files can be saved
- Transportation cost can be added separately according to sources (including the escalation rates)
- Provide Financial indicators also including Project IRR, Equity



# CostGenCal

## Generation Cost Calculator

IRR, Modified IRR (MIRR), NPV, Payback periods etc, in case selling price is provided as input

Input Sheet 1	Input Sheet 2	Financial Indicators	Generation Cost Breakup	Summary
		Bid Evaluation Factor	Liquidated Damage	ANFCR 18.6%
for TG Cycle Heat Rate (@ 105% load)	₹ 149,22,190.6	₹ 217,71,580.5		PLF 89.93
for Plant Heat Rate (@ 105% load)	₹ 12683,86,207	₹ 18505,84,348		Units Exported in a year 58927,44,000
for TG Cycle Heat Rate (@ 100% load)	₹ 568,46,440.6	₹ 829,39,354.5		Capital Cost ₹ 506440,00.0
(for Plant Heat Rate) (@ 100% load)	₹ 48319,47,456	₹ 70498,45,137		Project Cost (Including WCR & IDC) ₹ 712465,71.0
for APC	₹ 2,08,312.98	₹ 3,03,930.09		Loan Component ₹ 498725,99.7
for Shortfall in Generati		₹ 35,623.29		IDC ₹ 197163,01.0
				WCM ₹ 6862,70,000
Show Repayment Schedule				

### Our Other Products

#### Simple Heat Balance:

Our flagship software for steam cycle optimization and HBD for Rankine cycle based power plants

#### Boiler Efficiency Calculator:

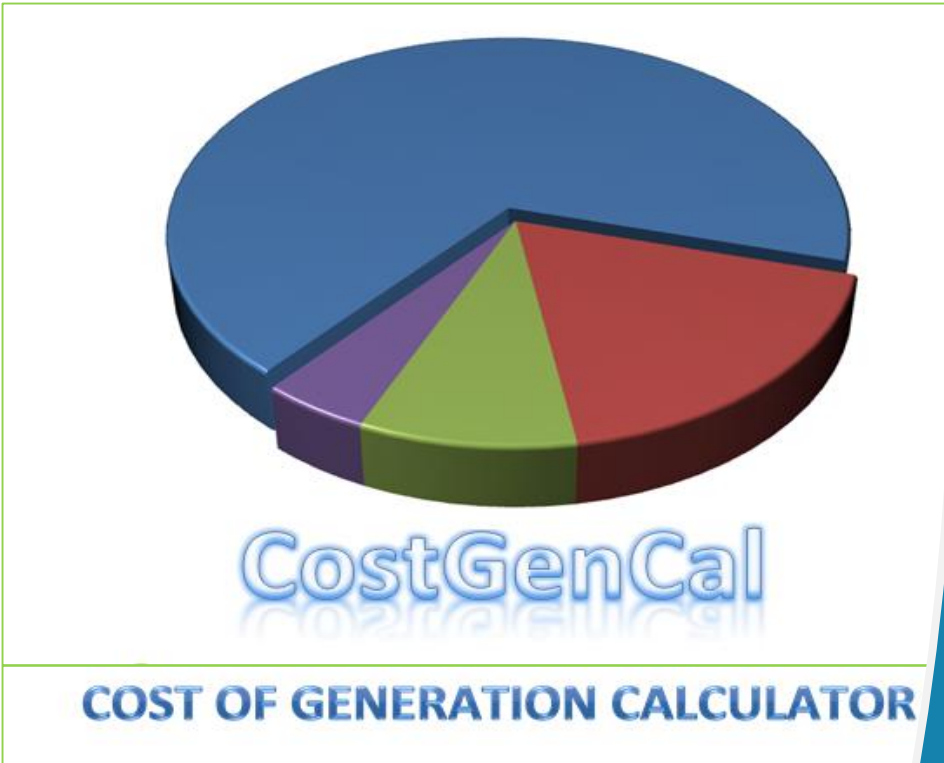
A tool for calculating Boiler Efficiencies

#### CondenserCal:

Condenser Calculator tool

#### DeaeratorCal

Calculations for Deaerator



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for Coal Based, Gas Based and Renewable Energy Based Power Plants