

Crystal Ball Report - Full

Run preferences:

Number of trials run	1,000
Monte Carlo	
Random seed	
Precision control on	
Confidence level	95.00%

Run statistics:

Total running time (sec)	96.82
Trials/second (average)	10
Random numbers per sec	93

Crystal Ball data:

Assumptions	9
Correlations	0
Correlation matrices	0
Decision variables	0
Forecasts	1

Forecasts

Worksheet: [Scenario 2.xlsx]Economic Analysis

Forecast: Gross earnings

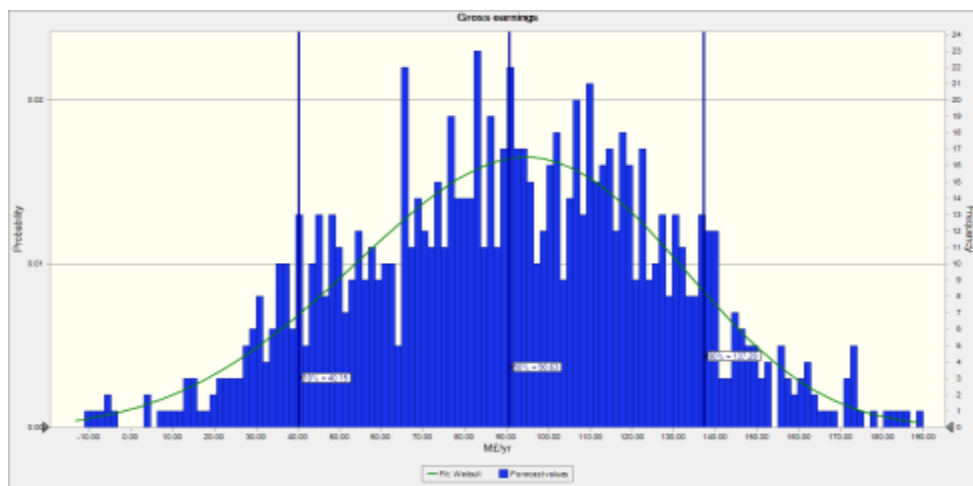
Cell: J14

Summary:

Entire range is from -35.06 to 189.91

Base case is 12.94

After 1,000 trials, the std. error of the mean is 1.18



Statistics:

Forecast values

Trials	1,000
Base Case	12.74
Mean	90.20
Median	90.71
Mode	---
Standard Deviation	37.32
Variance	1392.57
Skewness	-0.1347
Kurtosis	2.77
Coeff. of Variation	0.4137
Minimum	-35.06
Maximum	189.91
Range Width	224.97
Mean Std. Error	1.18

Forecast: Gross earnings (cont'd)**Cell: J14**

Percentiles:	Forecast values
0%	-35.06
10%	40.15
20%	56.26
30%	70.28
40%	81.39
50%	90.63
60%	101.49
70%	111.81
80%	122.56
90%	137.29
100%	189.91

End of Forecasts

Assumptions

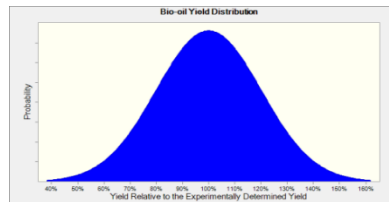
Worksheet: [Scenario 2.xlsx]Economic Analysis

Assumption: Bio-oil Yield

Cell: J5

Normal distribution with parameters:

5% 67% (=K5)
95% 133% (=L5)

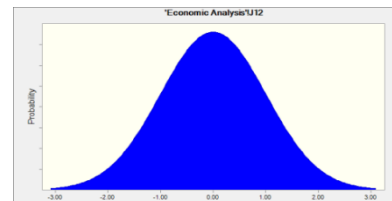


Assumption: J12

Cell: J12

Normal distribution with parameters:

Mean 0.00
Std. Dev. 1.00

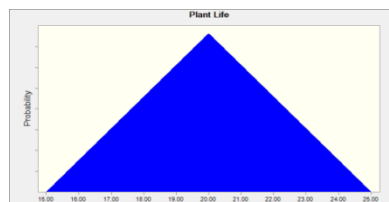


Assumption: Plant Life

Cell: J9

Triangular distribution with parameters:

Minimum 15.00 (=J10)
Likeliest 20.00
Maximum 25.00 (=J11)



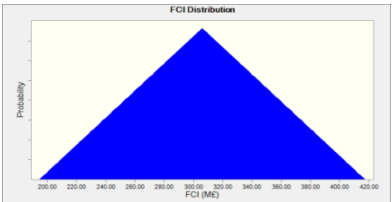
Worksheet: [Scenario 2.xlsx]Equipment costing

Assumption: FCI

Cell: O33

Triangular distribution with parameters:

Minimum	194.70
Likeliest	306.00
Maximum	417.30



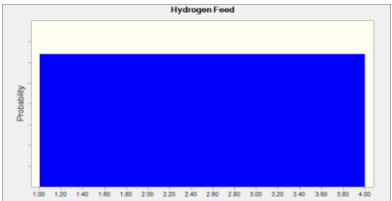
Worksheet: [Scenario 2.xlsx]H2 production balance

Assumption: Hydrogen Feed

Cell: G9

Uniform distribution with parameters:

Minimum	1.00
Maximum	4.00



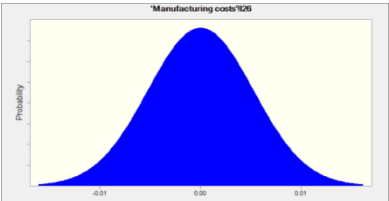
Worksheet: [Scenario 2.xlsx]Manufacturing costs

Assumption: I26

Cell: I26

Normal distribution with parameters:

5%	-0.01	(=I25)
95%	0.01	(=I24)

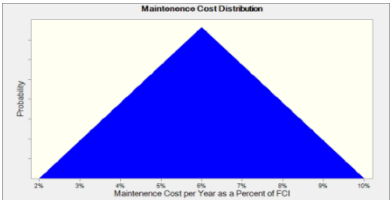


Assumption: T11

Cell: T11

Triangular distribution with parameters:

Minimum	2%	(=T12)
Likeliest	6%	
Maximum	10%	(=T13)



Worksheet: [Scenario 2.xlsx]Revenues

Assumption: Benzene Selling Price

Cell: D7

Normal distribution with parameters:

5%	0.36	(=D9)
95%	0.72	(=D8)

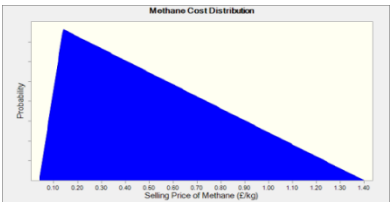


Assumption: Methane Selling Price

Cell: D17

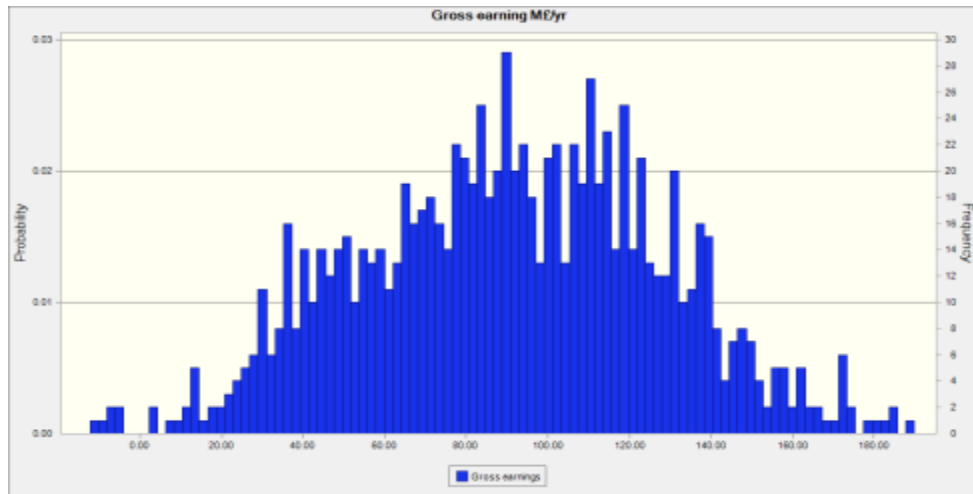
Triangular distribution with parameters:

Minimum	0.04	(=D18)
Likeliest	0.14	
Maximum	1.40	(=D19)



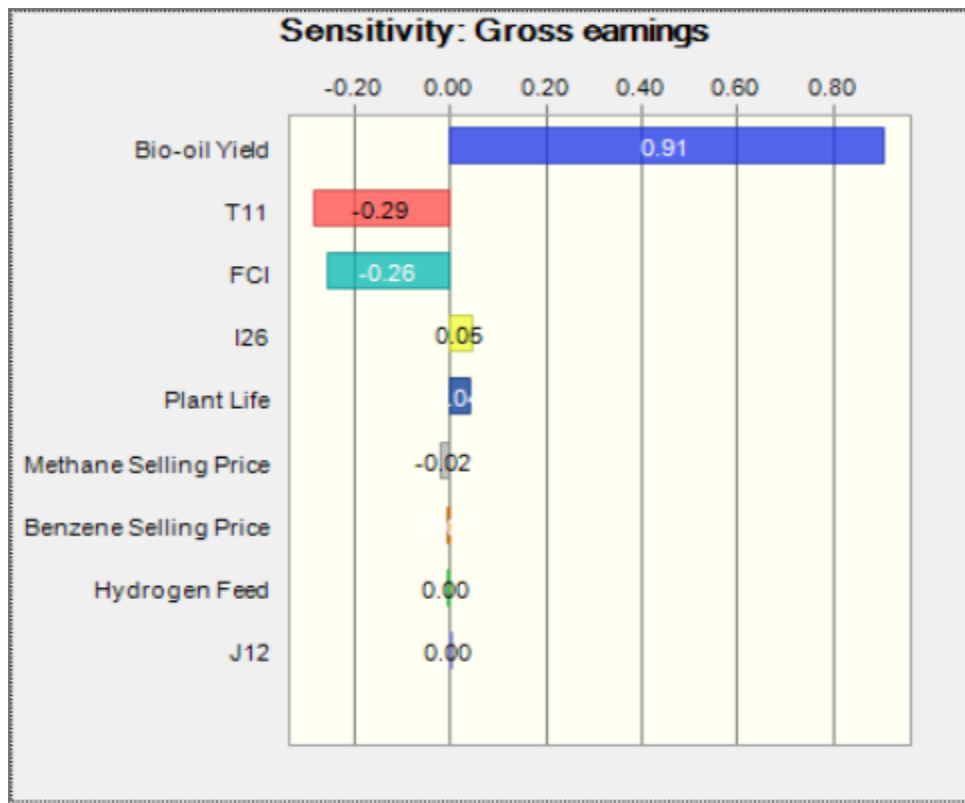
End of Assumptions

Overlay Charts

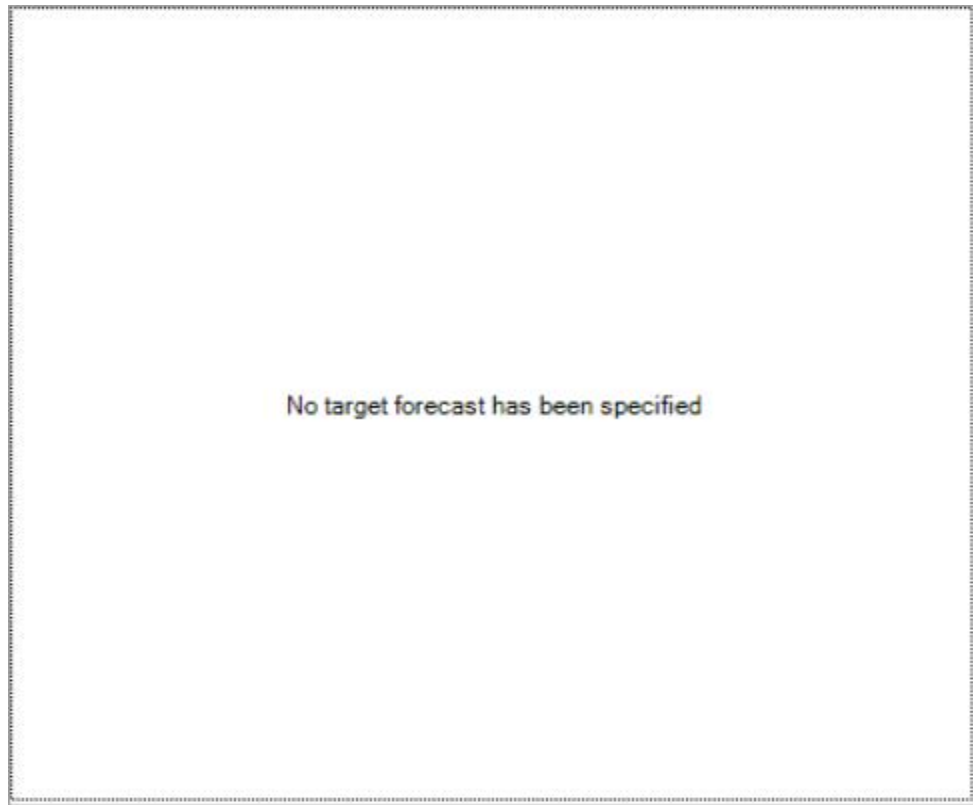


End of Overlay Charts

Sensitivity Charts



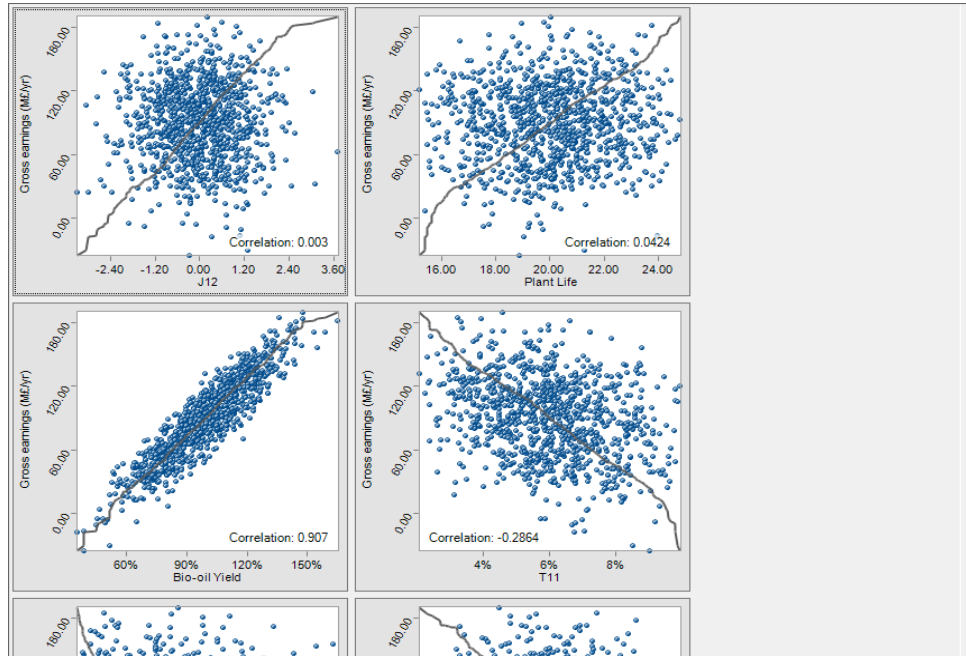
No target forecast has been specified



End of Sensitivity Charts

Scatter Charts

Scatter Chart: Gross earnings



End of Scatter Charts