

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)	30.82
Trials/second (average)	32
Random numbers per sec	260

Crystal Ball data:

Assumptions	8
Correlations	0
Correlation matrices	0
Decision variables	0
Forecasts	1

Forecasts

Worksheet: [Scenario 1_updated.xlsx]Economic Analysis

Forecast: Gross earnings

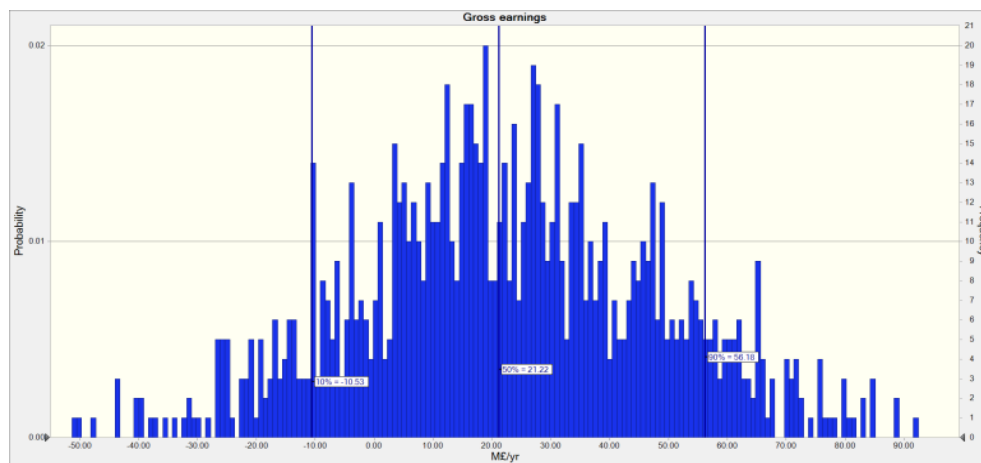
Cell: J14

Summary:

Entire range is from -66.53 to 129.45

Base case is 27.30

After 1,000 trials, the std. error of the mean is 0.83



Statistics:

Forecast values

Trials	1,000
Base Case	27.80
Mean	22.17
Median	21.22
Mode	---
Standard Deviation	26.25
Variance	688.82
Skewness	0.0088
Kurtosis	3.24
Coeff. of Variation	1.18
Minimum	-66.53
Maximum	129.45
Range Width	195.98
Mean Std. Error	0.83

Forecast: Gross earnings (cont'd)

Cell: J14

Percentiles:	Forecast values
0%	-66.53
10%	-10.53
20%	1.13
30%	9.16
40%	15.48
50%	21.22
60%	27.78
70%	35.04
80%	45.21
90%	56.18
100%	129.45

End of Forecasts

Scenario 1bis

Assumptions

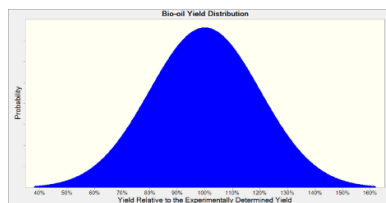
Worksheet: [Scenario 1_updated.xlsx]Economic Analysis

Assumption: Bio-oil Yield

Cell: J5

Normal distribution with parameters:

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

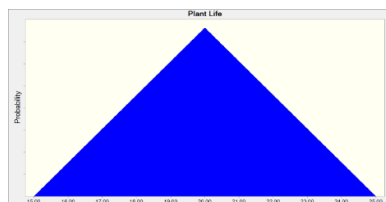


Assumption: Plant Life

Cell: J9

Triangular distribution with parameters:

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



Worksheet: [Scenario 1_updated.xlsx]Equipment costing

Assumption: FCI

Cell: O33

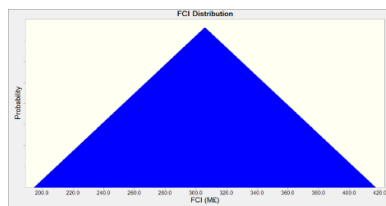
Triangular distribution with parameters:

Minimum	194.7	(=O34)
Likeliest	306.0	(=O33)
Maximum	417.3	(=O35)

Scenario 1bis

Assumption: FCI (cont'd)

Cell: O33



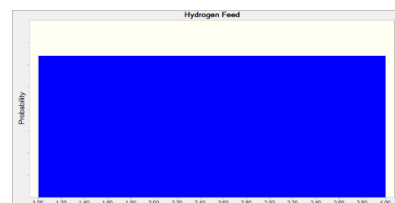
Worksheet: [Scenario 1_updated.xlsx]H2 production balance

Assumption: Hydrogen Feed

Cell: G9

Uniform distribution with parameters:

Minimum	1.00
Maximum	4.00



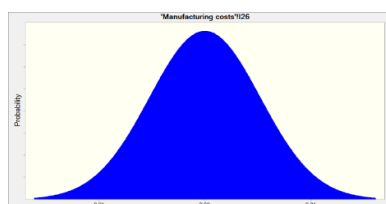
Worksheet: [Scenario 1_updated.xlsx]Manufacturing costs

Assumption: I26

Cell: I26

Normal distribution with parameters:

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



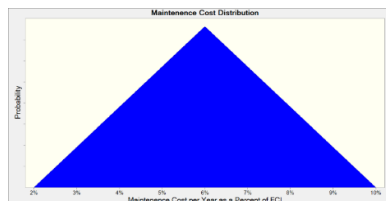
Scenario 1bis

Assumption: T11

Cell: T11

Triangular distribution with parameters:

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



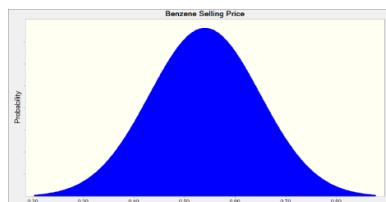
Worksheet: [Scenario 1_updated.xlsx]Revenues

Assumption: Benzene Selling Price

Cell: D7

Normal distribution with parameters:

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

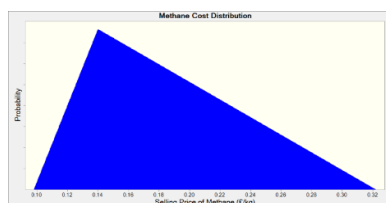


Assumption: Methane Selling Price

Cell: D17

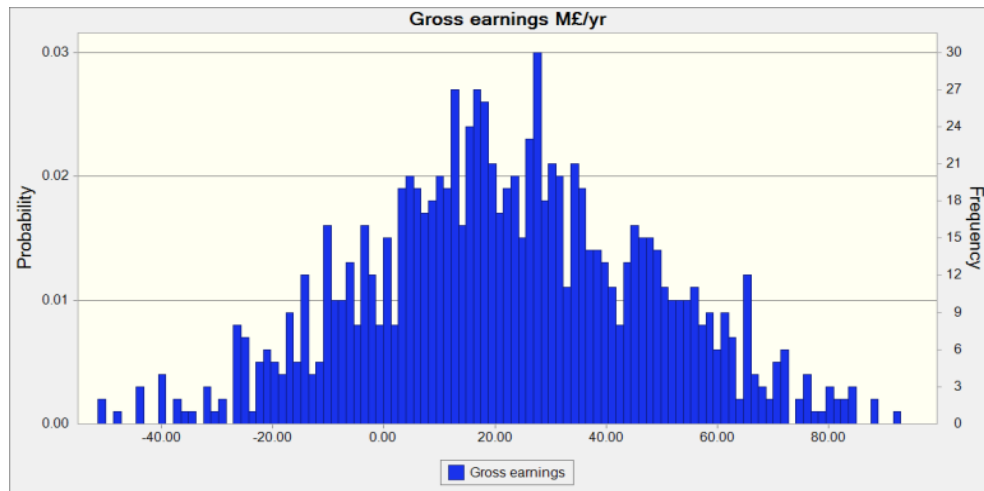
Triangular distribution with parameters:

Minimum	0.10	(=D18)
Likeliest	0.14	
Maximum	0.32	(=D19)



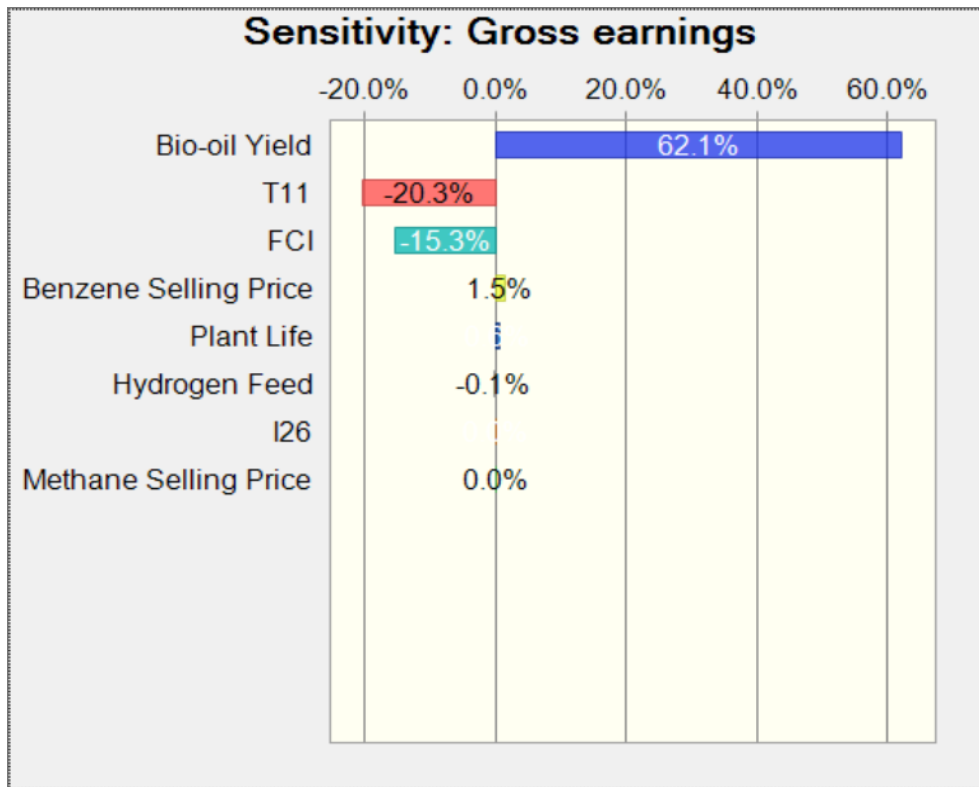
End of Assumptions

Overlay Charts



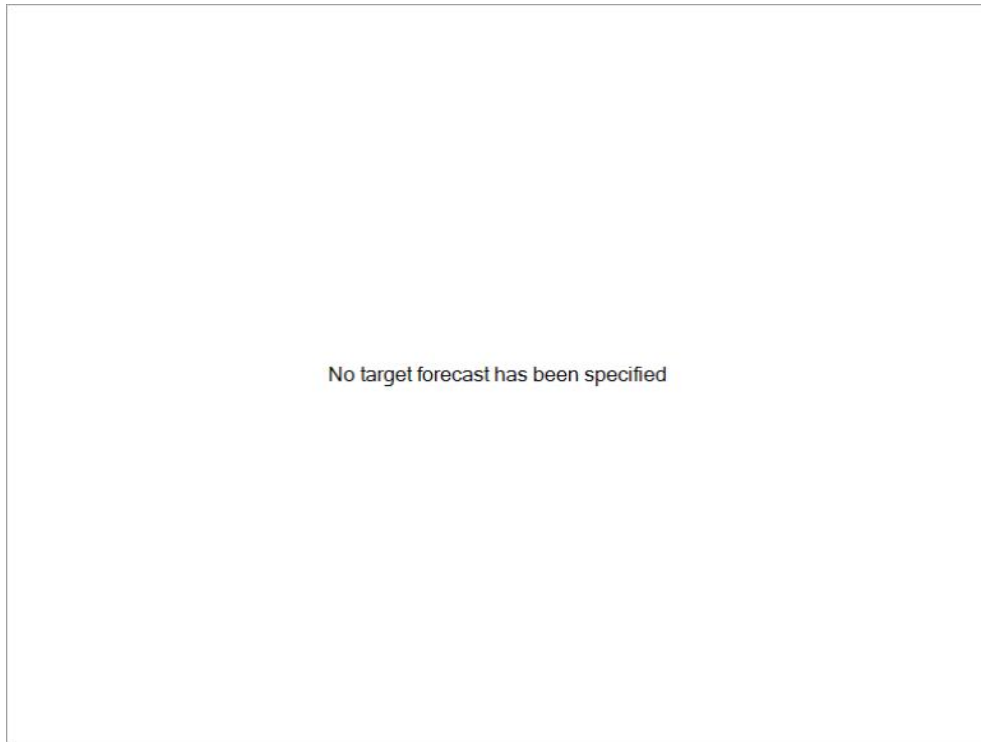
End of Overlay Charts

Sensitivity Charts



No target forecast has been specified

Scenario 1bis



End of Sensitivity Charts