

# Numa Hydrocarbon Fiscal Analytics

The financial management of oil and gas exploration and production is faced with various challenges.

Our Hydrocarbon Fiscal Analytics solution enables the management of the financials of oil and gas exploration and production activities.

### Users are able to:

- Automate the calculation and reporting of fiscal results of oil and gas exploration and production activities of concessions.
- Perform analytics on the fiscal of oil and gas production, including scenario and sensitivity analysis.
- Undertake financial planning in the production of oil and gas production.
- Optimising fiscal results by planning production and lifting.

The solution provides for multiple types of production sharing models, as well as parameters such as types of hydrocarbons, i.e. crude oil type, gas and condensate.

# Fiscal Type Module

This module enables the user to define the characteristic of concession contract fiscal type.

ofit Split %	Contractor's R/C Ratio	Cost Ceiling %	Profit Split					
			Cummulative Proc BELOW Cum		Cummulative Production ABOVE Cummulative			
			Profit Oil	Unutilised	Profit Oil	Unutilised Cost		
			PET : CONT	PET : CONT	PET : CONT	PET : CONT		
	-0.1 < R/C =< 1	70%	20%	80%	50%	50%		
	1 < R/C =< 1.4	60%	30%	70%	50%	50%		
	1.4 < R/C =< 2	50%	40%	60%	50%	50%		
	2 < R/C =< 2.5	30%	50%	50%	50%	50%		
	2.5 < R/C =< 3	30%	60%	40%	50%	50%		
	R/C > 3	30%	70%	30%	50%	50%		
ty	A	В	С					
ity Participation (	40%	50%	10%					

## **Entitlement Calculation**

The system would be able to cater for multiple types of entitlement calculation. Users will be able to customize the calculation for every concession contract, by setting the parameters of those concession contracts.

	Cost Bank Level 0	PSC Type	Royalty Calculation	RC Index	CR Index	Cost Ceiling	CR based Percentage	RC based Percentage	Static Percentage
PSC6	Of	85	1	0	0	1	0	0	1
PSC7	OI	EOR PSC	1	1	0	1	0	1	0
PSC8 OI Gas	OI	EOR PSC	1	1	0	1	0	1	0
	Gas	EOR PSC	1	1	0	1	0	1	0
PSC9	OI	EOR PSC	1	- 1	0	1	0	1	0
	OI	PVB	1	0	0	1	0	0	1
	Gas	PVB	1	0	0	1	0	0	1
PSC13	OI	R/C	1	1	0	1	0	1	0
PSC15 OI Gas	OI	R/C	1	1	0	1	0	1	0
	Gas	R/C	1	1	0	1	0	1	0
PSC28 Oil Gas	Oi	R/C	1	1	0	1	0	1	0
	Gas	R/C	1	1	0	1	0	1	0
PSC29 Gas	OI	R/C	1	1	0	1	0	1	0
	Extended Area Oil	R/C	0	0	0	0	0	0	0
	Gas	R/C	1	- 1	0	1	0	1	0
	Extended Area Ga	R/C	0	0	0	0	0	0	0
PSC31	OI	R/C	1	1	0	1	0	1	0
PSC32	OI	R/C	1	1	0	1	0	1	0
PSC34	OI	R/C	1	1	0	1	0	1	0
PSC37	OI	R/C	1	1	0	1	0	1	0
	Gas	R/C	1	1	0	1	0	1	0

### Input Module

This module allows the user to input the 12 months parameters (production, price, expenditure and exchange rate) directly into the system, in computing the fiscal results.



The solution enables the roll forward of opening and closing balances and linking the results to the other calculated results in the other modules.





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# **Stock and Sales Report**

The solution also offers the stock and sales reporting which calculate the opening stock, sales, price and production allocation resulting from the entitlement calculation.

DESCRIPTIONS	JANUARY	FEBRUARY	MARCH	APRIL	MAY
A. Opening Stock	1,116,223	290,375	337,236	311,025	136,266
B. Production	374,152	146,860	93,790	325,241	39,453
C. Available to Sell	1,490,375	437,236	431,025	636,266	175,719
D. Estimated Sales	20,000				
E. Closing Stock	290,375	337,236	311,025	136,266	125,719
F. Price (USD)	40.6540	40.2351	43.5431	41.3244	44.0000
G. Estimated Sales Value (USD)	48,784,800.00	4,023,510.00	5,225,172.00	20,662,200.00	2,200,000.00

User will also be able to estimate the monthly sales and plan for the whole year.

# **Profitability Forecast Report**

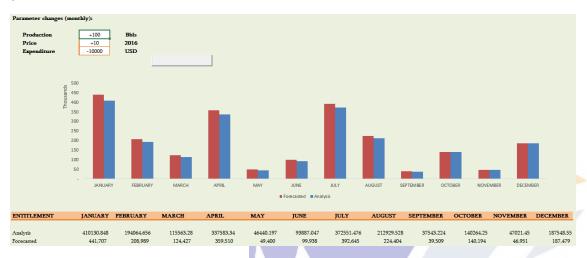
The solution is also able to generate the profitability report where it calculates the gross profit for each concession contract.

It takes the entitlement result as revenue and subtract the expenditure to derive the profit.

This can also be monitored on monthly basis.

## Scenario Analysis

The solution enables scenario analysis where users can input changes on any of the three parameters (Production, Price, Expenditure) and compares the result with the original data set.



Numa Hydrocarbon Fiscal is powered by IBM Cognos TM1 / IBM Planning Analytics.

