

Mexico Round 1 Fiscal Terms:
The Incentive for Gold Plating

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What is Gold Plating?

For a petroleum fiscal system to be successful, there must be an alignment between the goals of the host country and the petroleum companies carrying out exploration and production.

An example of alignment is that both the host government and the investor benefit if a petroleum company carries out its operations in an efficient manner at the lowest cost per barrel. This means more revenues for the host country and more profits for the investor.

Therefore, under a well designed fiscal system the benefits of higher efficiency and lower costs are shared. The investor should receive a share of the cost saving in the form of more cash per barrel. There is no incentive to lower costs if the government taxes away all of the additional revenue.

What is Gold Plating?

Misalignment occurs when the fiscal system is designed in such a way that the investor receives less cash if operations are more efficient. Such a system creates an incentive for the investor to manage the operations in such a way that costs are higher than necessary and operations are inefficient.

This behavior is called *gold plating*.

Gold plating is incentivized by fiscal systems that have sliding scales that disproportionately increase with higher levels of profitability (IRR). Gold plating is avoided with moderate increases of the profit share to Government, such as from 20% to 30%. An increase to 80%, in contrast, would bring about misalignment of interests.

A fiscal system that incentivizes gold plating is detrimental to the host country in two ways: 1) total profits to be shared are less because of the higher costs; and 2) paradoxically, the oil company receives more cash out from lower profits.

Mexico Round 1 Fiscal Terms

At present, the Mexico Round 1 Fiscal Terms illustrate the potential for severe gold plating.

This will be demonstrated with a calculation example in the following slides.

The Round 1 Fiscal Terms include a Profit Share for the Government (called *Contraprestación*). The terms related to this Profit Share are based on the IRR. The incentive for gold plating may be seen in the sliding scale related to Profit Share. See Annex 3 of the Model Contract (pp. 64-77):

<http://ronda1.gob.mx/Contratoindividual.pdf>

Example of Gold Plating

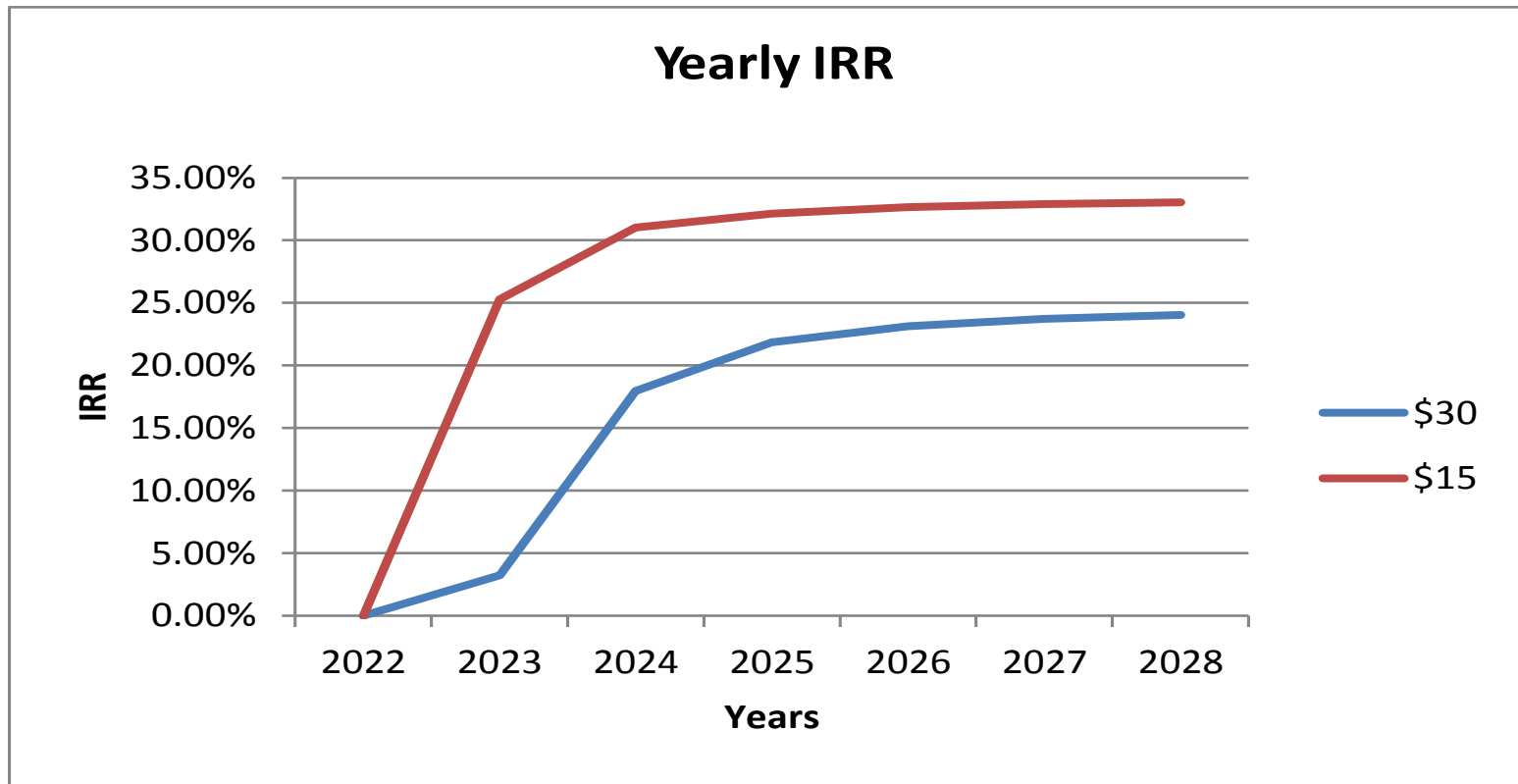
The example uses a 10 million barrel field in shallow water producing oil over 7 years. The oil price is assumed to be \$ 80 per barrel. The start of the cash flow is assumed to be 2014 and the start of production is in 2022.

It is assumed that the company made a bid of an 80% profit share to the contractor reducing to 16% as per the Annex 3 formulas of the Model Contract based on the IRR range from 15% to 30%. This means the profit share to the Government goes up from 20% to 84%.

Two cost scenarios are compared: \$ 30 per barrel vs. \$ 15 per barrel.

Gold Plating Demonstration

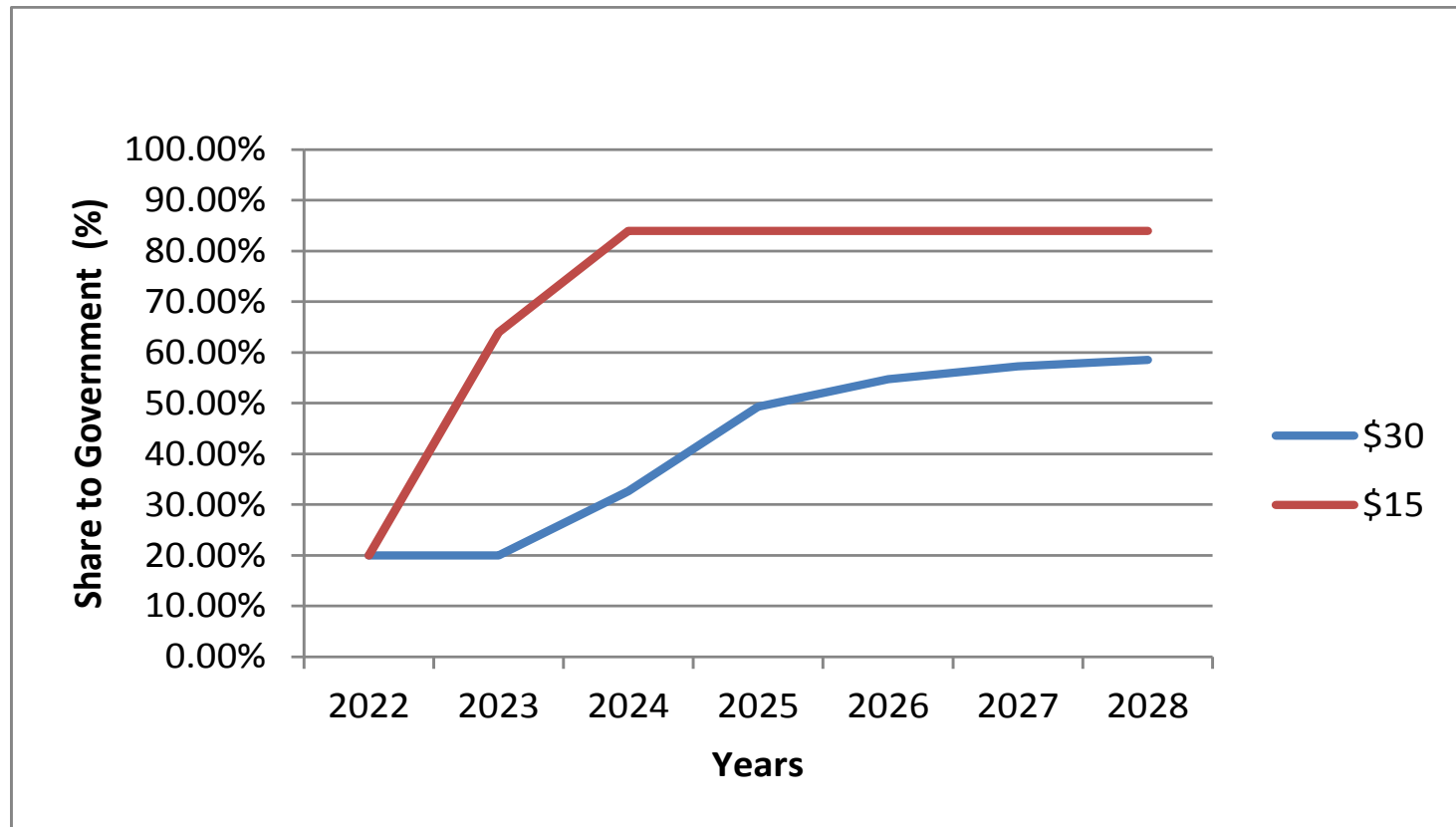
Incentivizing gold plating



The IRR of the \$ 15 per barrel cost case increases much faster than the \$ 30 per barrel cost case during the 7 year life of the field.

Gold Plating Demonstration

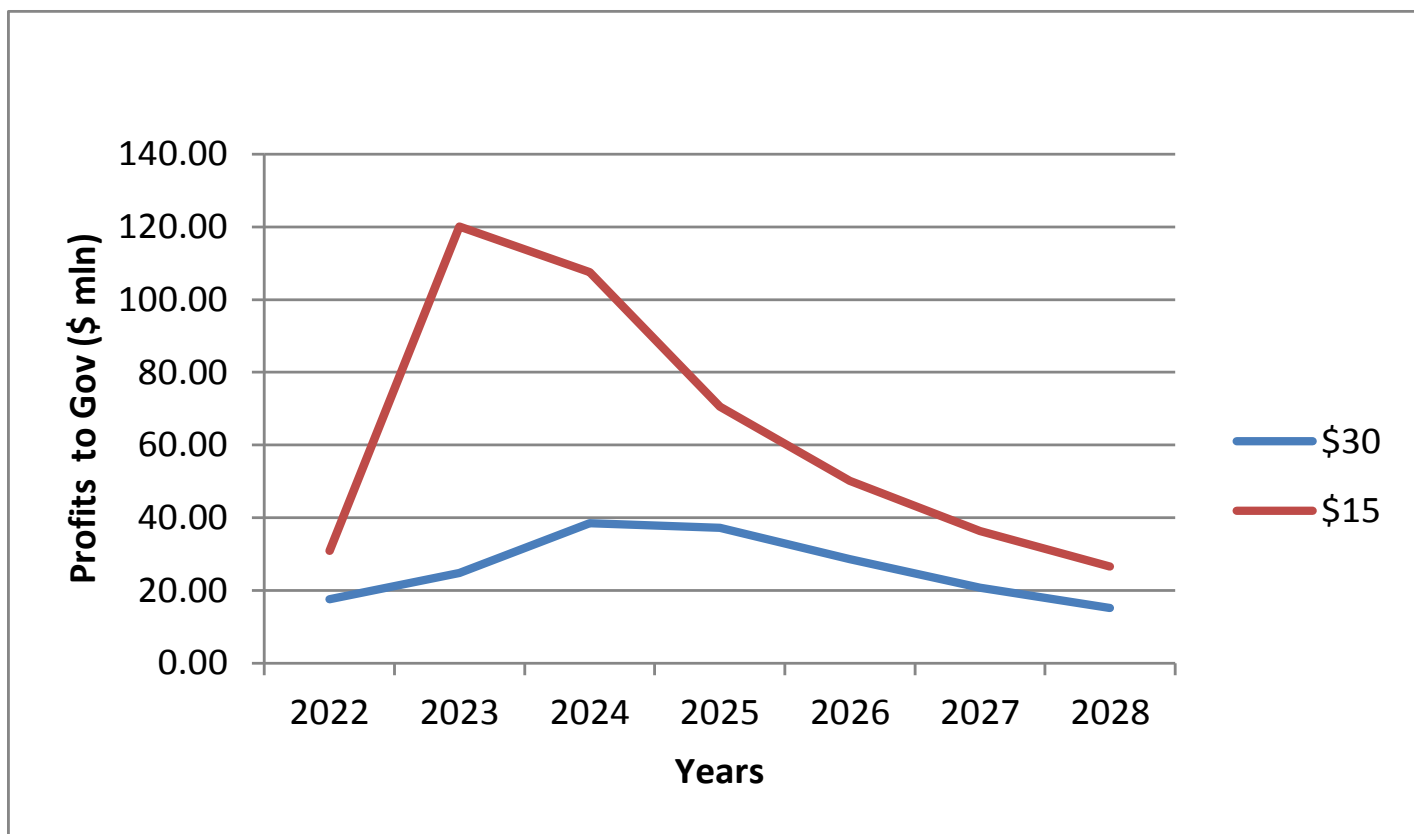
Yearly Profit Share (%) to Government



Due to the higher IRR, the percentage share of the profits to Government increases much faster under the \$ 15 per barrel cost scenario.

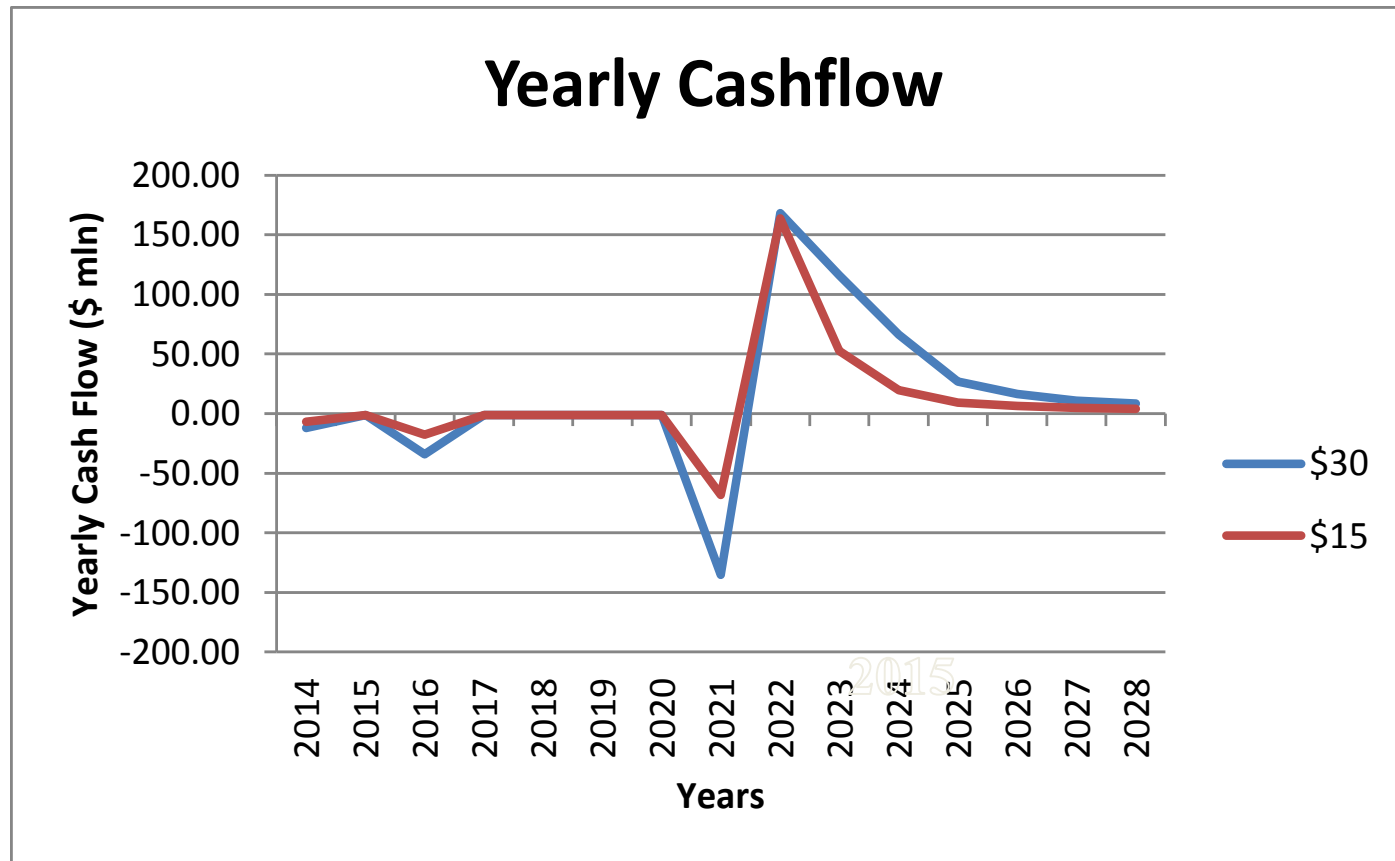
Gold Plating Demonstration

Yearly Amount of Profits to Government



Due to the higher share to Government, the amount of the profits payable to Government is much higher under the \$ 15 per barrel cost scenario.

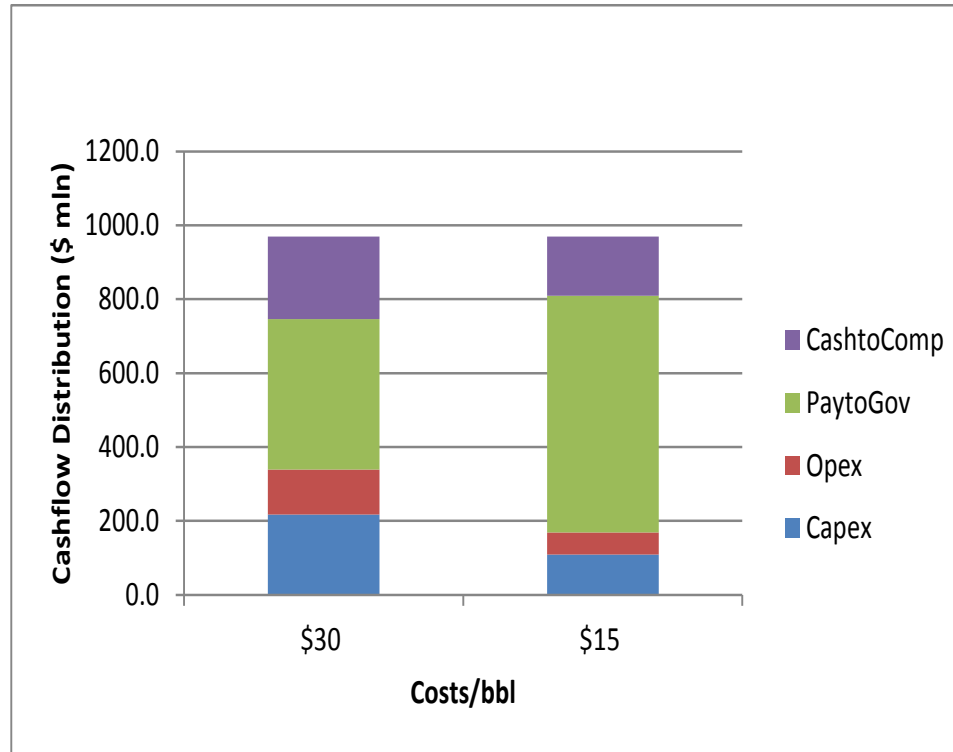
Gold Plating Demonstration



The increase in payments to Government is much higher than the cost savings between \$ 30 and \$ 15 per barrel costs. Therefore the total cash to the Contractor is less under the \$ 15 per barrel scenario.

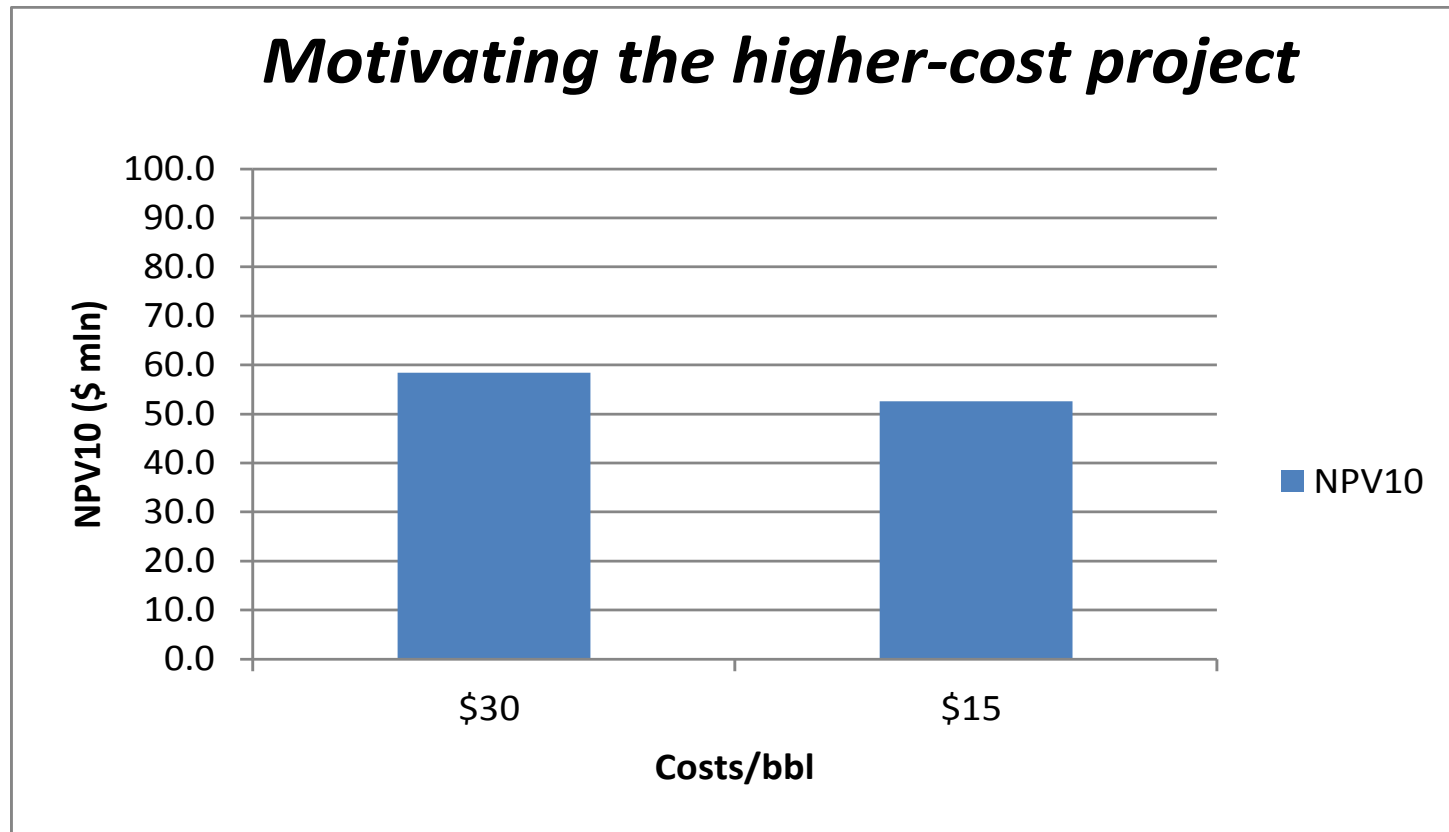
Gold Plating Demonstration

Less cash to the investor in a lower-cost project



The chart illustrates how the oil company ends up with less cash, if the company is more efficient and manages to reduce costs from \$ 30 to \$ 15 per barrel. The reduction is very significant. Therefore the Mexico Round 1 fiscal terms pose the risk for severe gold plating.

Gold Plating Demonstration



The Net Present Value discounted at 10% (NPV@10%) is actually higher for the \$ 30 per barrel scenario and therefore in this case a \$ 30 development plan may be more attractive to the investor than a \$ 15 plan.

Solution for going forward

It is relatively easy to modify the fiscal terms in such a way that *the incentive for gold plating* is eliminated.

The IRR based feature and the formulas in Annex 3 can be maintained. However, the emphasis on the profit share based on this feature should be reduced. Less profits should be collected from this feature for Government.

In order to maintain attractive revenues for Government, an additional feature can be introduced based on a profit share with a sliding scale based on the level of daily production.

This is a standard feature in the majority of the production sharing contracts around the world.

In total, the system should be designed in such a way that it is competitive with fiscal systems of other countries, for similar shallow water circumstances, over a wide range of cost and price assumptions.