

**Modernized Royalty Framework: Formulas
Natural Gas (Methane) and Ethane
For wells spud on or after January 1, 2017**

R% = Price Component (r_p) + Quantity Adjustment (r_q)

R% has a minimum of 5% and maximum of 36%

Royalty Parameters		
	Price (C\$/GJ)	% Change (%/\$/GJ)
P1	2.40	6.00000%
P2	3.00	4.25000%
P3	6.75	2.25000%

Price Component (r_p)	
Price (\$/GJ)	r_p
PP<=2.40	5%
2.40<PP<=3.00	$((PP-2.40)*0.06000+0.05000)*100$
3.00<PP<=6.75	$((PP-3.00)*0.04250+0.08600)*100$
PP>6.75	$((PP-6.75)*0.02250+0.24538)*100$
Maximum	36%

Note: The treatment of the maturity threshold and quantity adjustment for natural gas will be similar to that for oil. Details are being finalized and will be available in the coming weeks.

A well will pay 5% royalty rate until revenue equals C*(\$). R% applies once a well's revenues exceed C* (post-C* phase). The minimum royalty rate in the post-C* phase is 5%.