

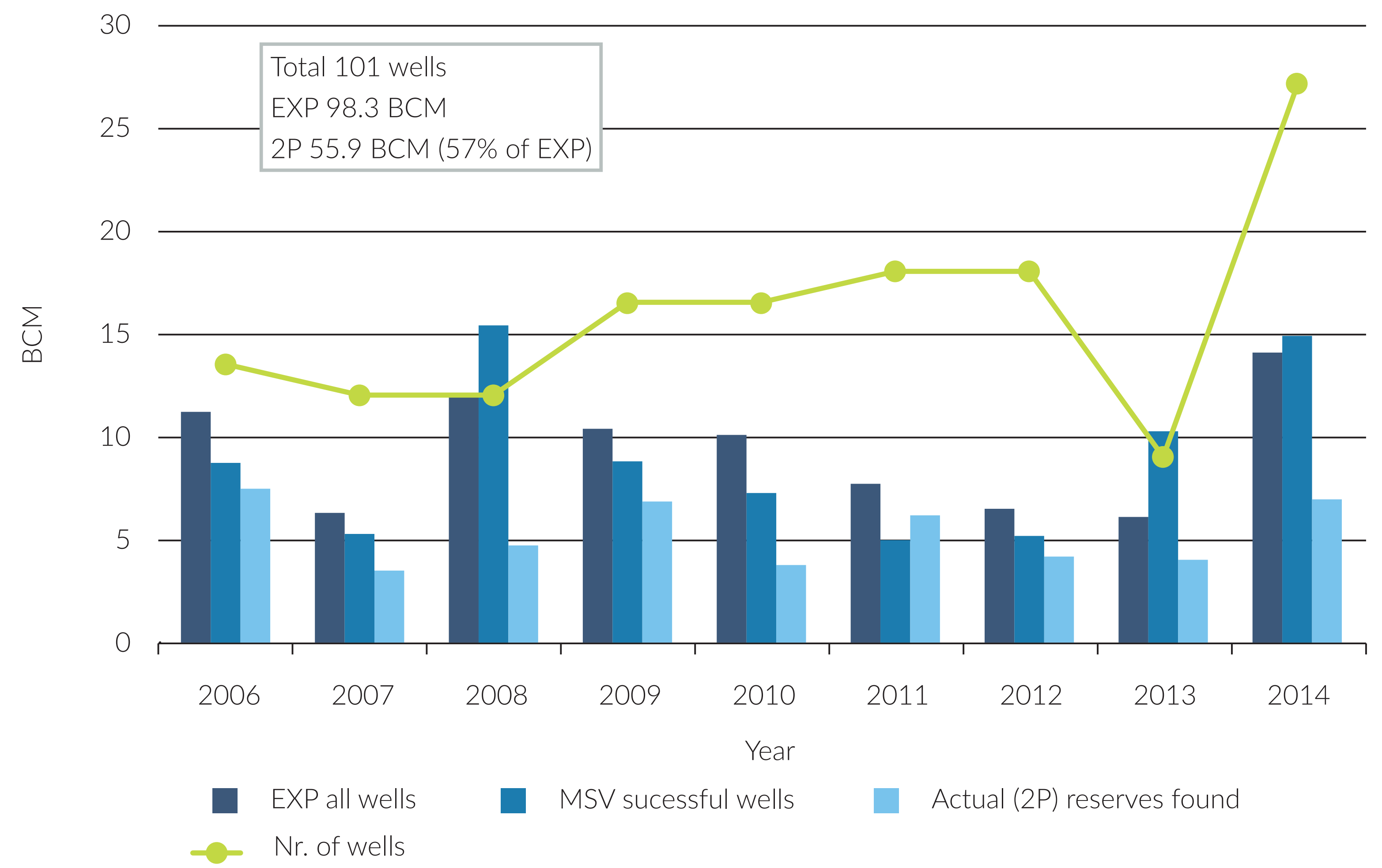
Exploration in a mature basin

101 exploration wells of the last 10 years

Average POS and Success Ratio (101 wells)



Total EXP vs Realisation (101 wells)

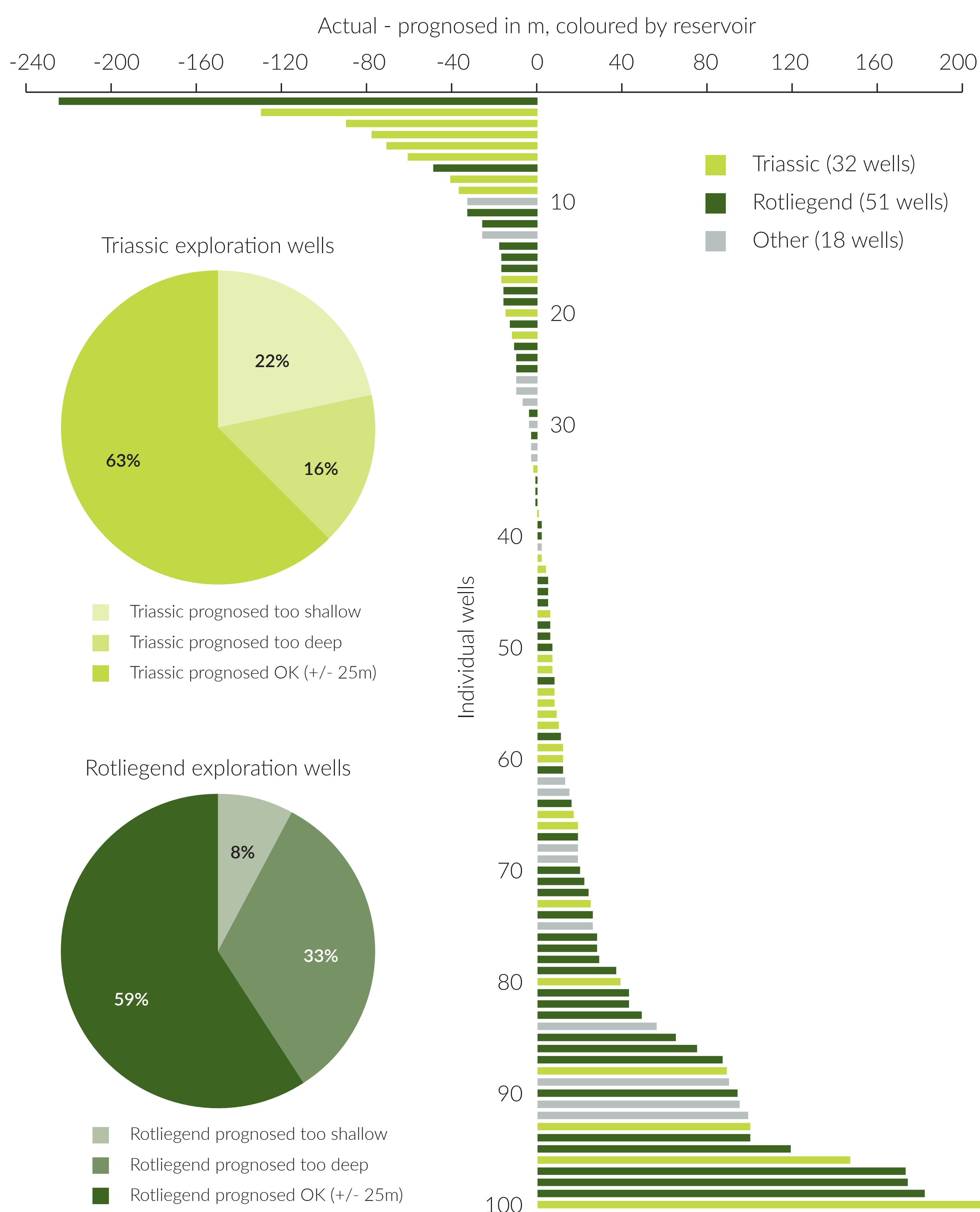


• Comparison of the post-drill Success Ratio with the pre-drill Probability of Success shows that the pre-drill POS is consistently underestimated, i.e. we are more successful than we think.

• The Expectation (EXP) is the Mean Success Volume (MSV) multiplied by Probability of Success (POS). With sufficient wells, the realised volumes should be equal to the sum of the expectations. As can be seen in the figure above this is not the case, for any given year. The same obviously applies to the sum total.

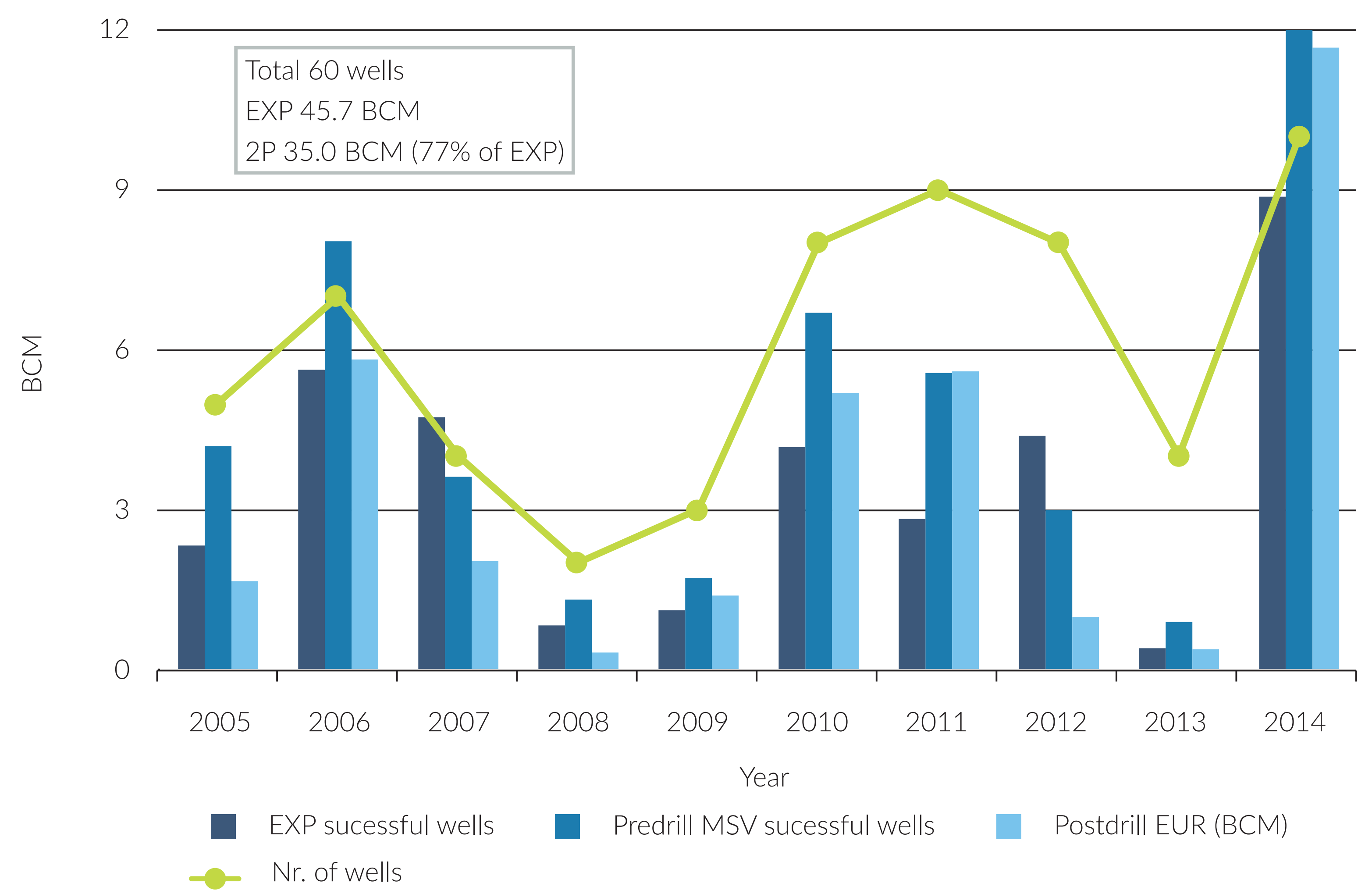
Time-Depth conversion plays a key role in volume Realisations

Delta reservoir depth (actual - prognosed)



Total EXP vs Realisation

(60 wells with depth error within 25 m)



• 77% of the expected volume is found in wells with a depth error smaller than 25m, whereas the average realised volume of the expected volume found for all wells is 57%. Hence, depth prediction plays an important role but cannot explain the entire mismatch.

CONCLUSIONS:

Underestimation of Probability of Success (POS) and overestimation of volumes.

Reducing uncertainties in Time-Depth conversion will result in more reliable volume predictions.