



MATURE AREAS SPECIFICITIES AND CHALLENGES

Working Group 1 (WOC1)



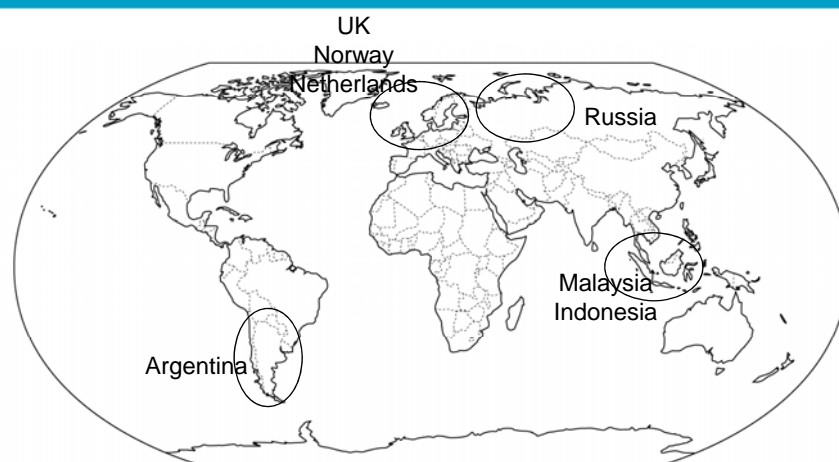
WHAT IS A MATURE AREA?

- CONNECTION TO A WELL ESTABLISHED MARKET
- SIGNIFICANT PRODUCTION RATE
(more than 4 Bcf/d)
- NO IDENTIFIED POTENTIAL FOR A SIGNIFICANT PRODUCTION INCREASE (+50%)



WHICH AREAS DID WE STUDY?

- FOR THE EUROPEAN MARKET :
UNITED KINGDOM, NETHERLANDS AND NORWAY
- FOR THE EUROPEAN MARKET AND RUSSIA : RUSSIA
(WEST SIBERIA)
- FOR THE ASIAN MARKET :
MALAYSIA AND INDONESIA
- FOR THE SOUTH AMERICAN MARKET :
ARGENTINA



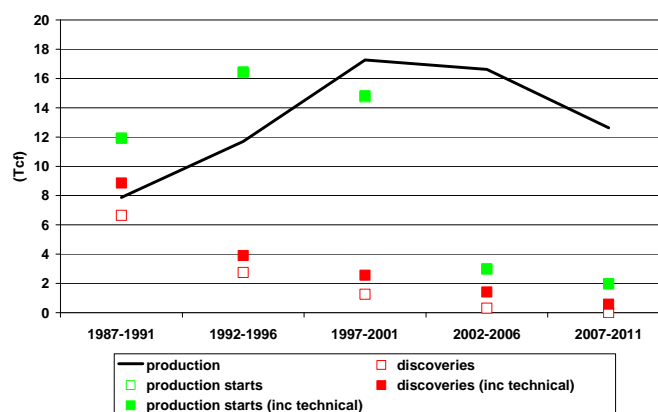


HOW DID WE PROCEED ?

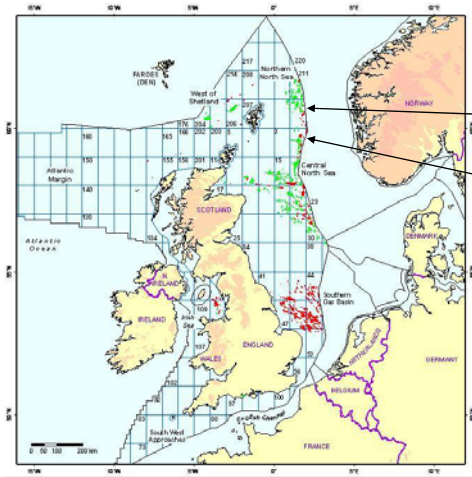
- BY COMPARING THE PAST DISCOVERIES AND PRODUCTION STARTS WITH THE PRODUCTION
- BY DESCRIBING THE PRODUCTION TRENDS



UK



Data from WoodMackenzie

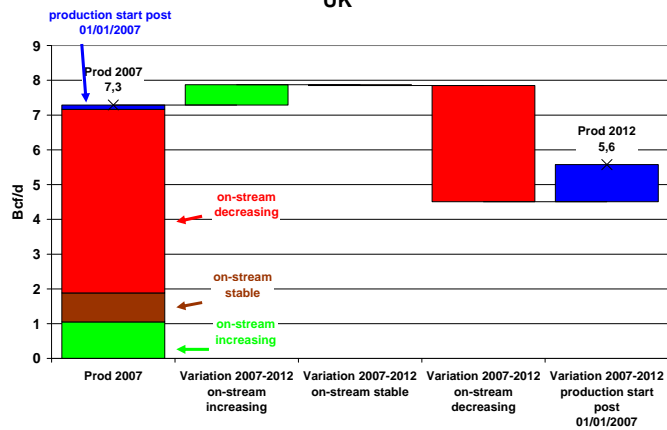


Alwyn (> 4 Tcf)
disc before 87 prod 87-91

Bruce (3Tcf)
disc before 87 prod 92-96



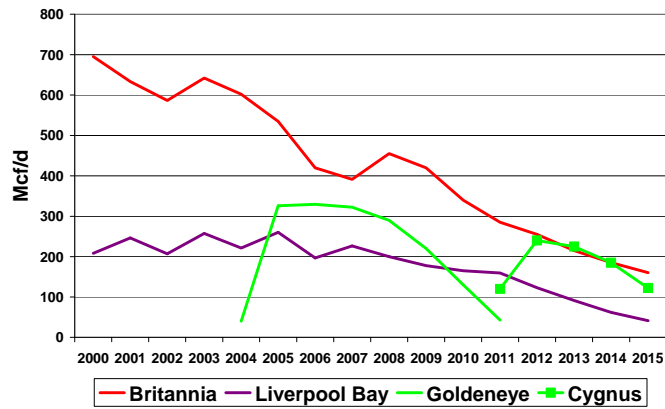
UK



Data from WoodMackenzie



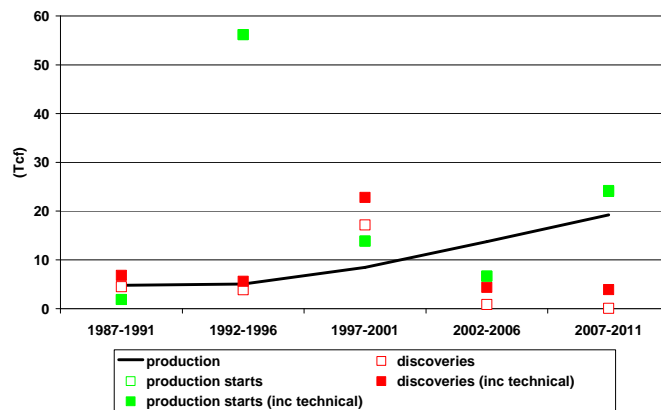
UK



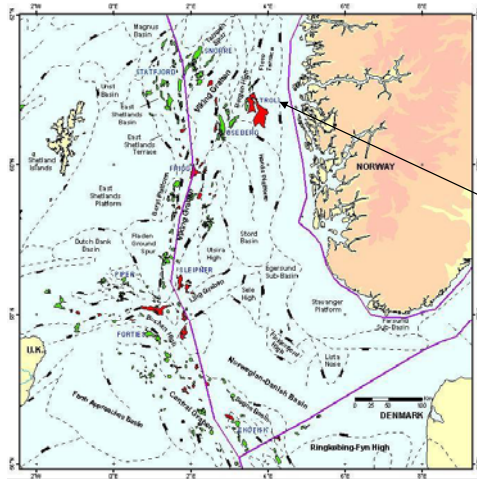
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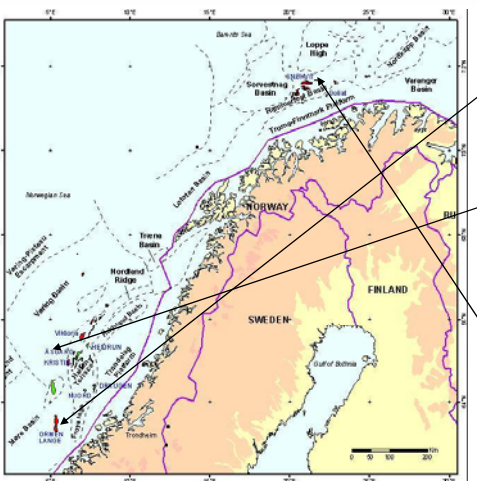
Norway



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Troll (46 Tcf)
disc in 79 prod 92-96



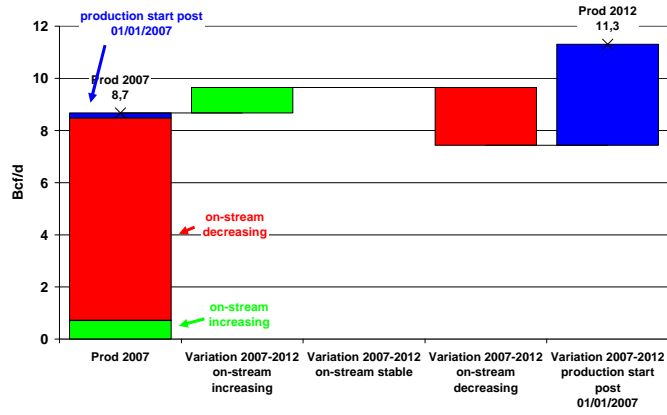
Ormen Lange (14 Tcf)
disc 97-01 prod 07

Asgard (6Tcf)
disc before 87 prod 97-01

Snohvit (6Tcf)
disc before 87 prod 07



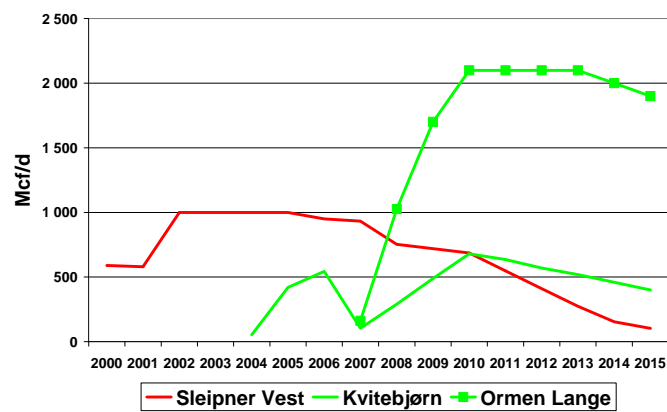
Norway



Data from WoodMackenzie



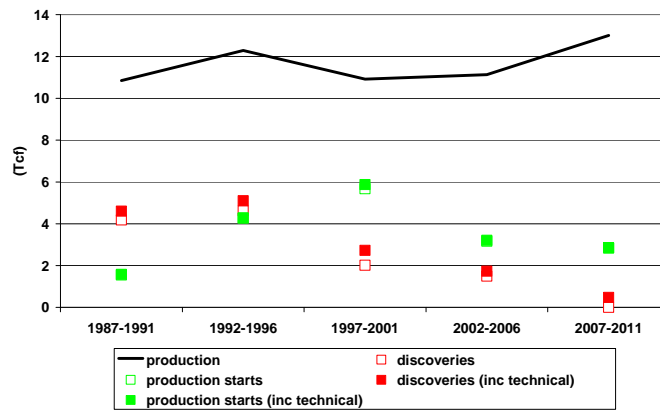
NORWAY



Data from WoodMackenzie



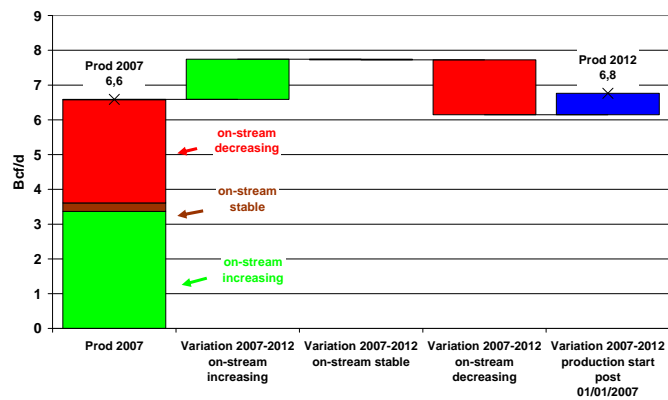
Netherlands



Data from WoodMackenzie



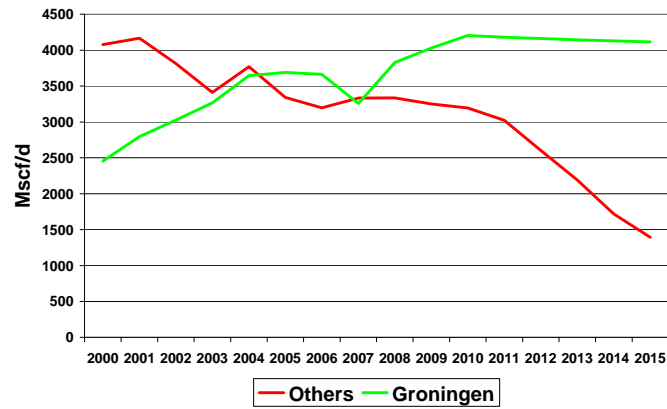
Netherlands



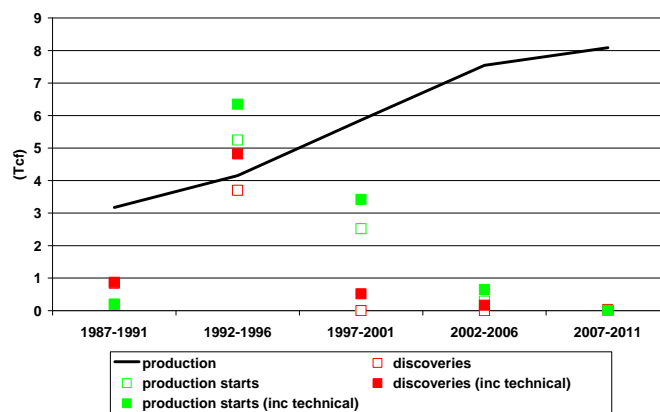
Data from WoodMackenzie



The Netherlands



Argentina



Data from WoodMackenzie

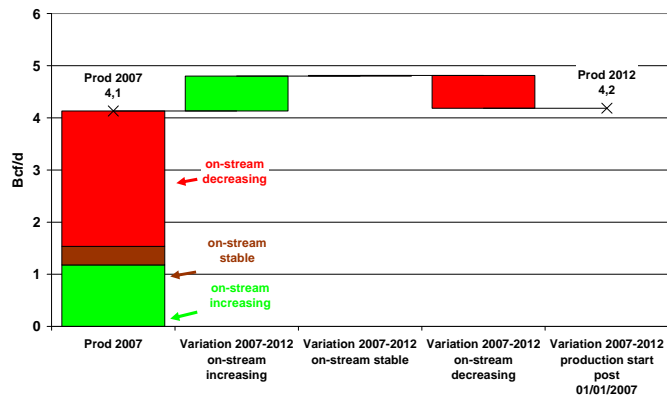


Acambuco (3Tcf)
disc in 92-96 prod 97-01

Aguada Pichana (3.5 Tcf)
disc in 1970 prod 92-96



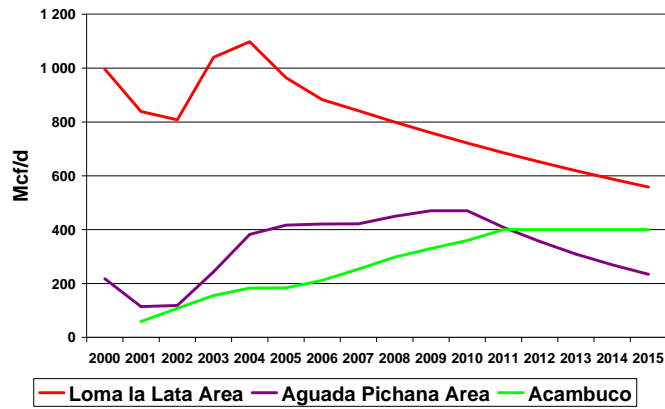
Argentina



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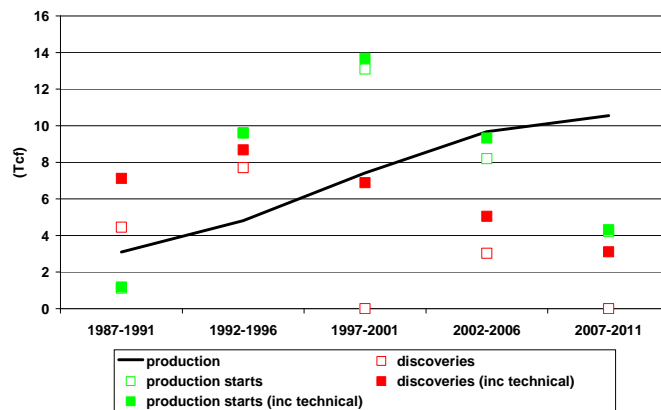
ARGENTINA



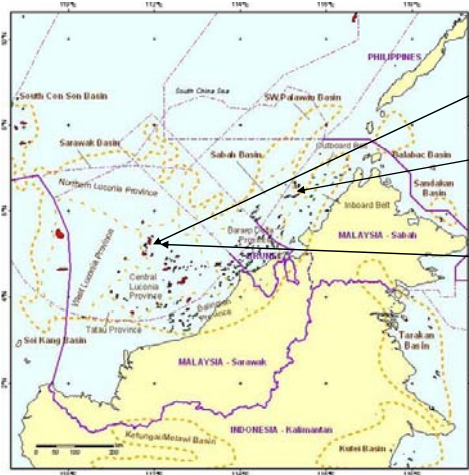
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Malaysia



Data from WoodMackenzie



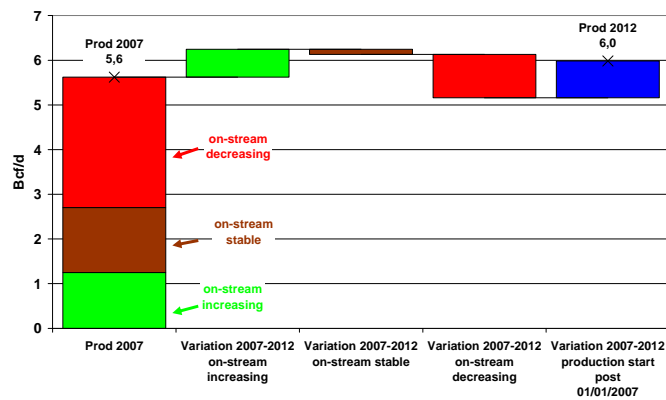
Kumang cluster (>3 Tcf)
disc 69 prod 07-11

Kebabangan (>3 Tcf)
disc 92-96 prod ?

SK8 (>4 Tcf)
disc 92-96 prod 02-06



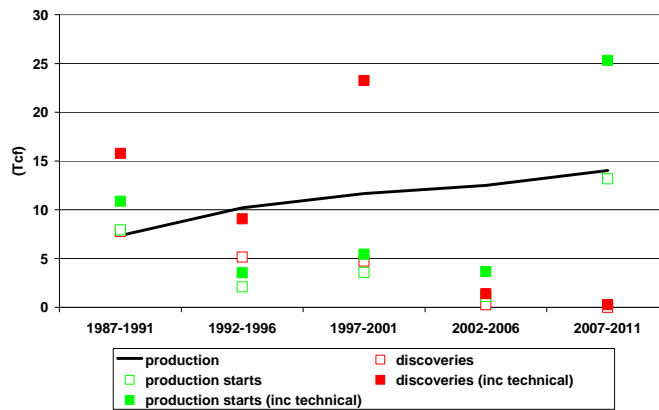
Malaysia



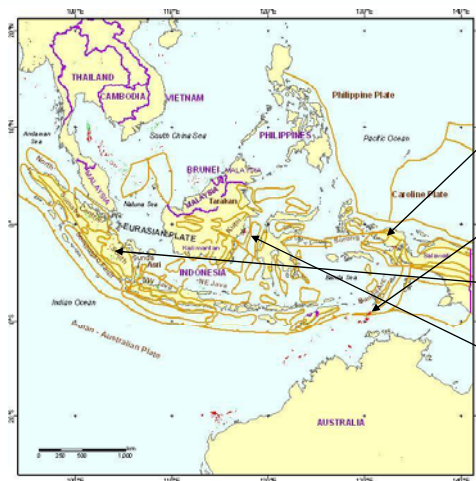
Data from WoodMackenzie



Indonesia



Data from WoodMackenzie



Berau (7 Tcf)
disc 87-91 prod 09

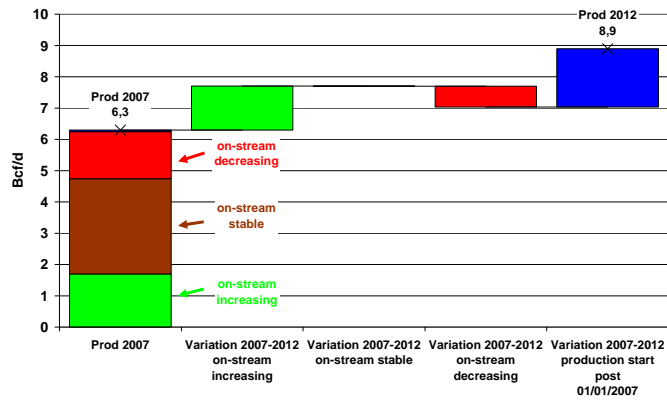
Abadi (14 Tcf technical)
disc 97-01
prod ?

Corridor (6 Tcf)
disc before 87
prod 87-91

Ganal and Rapak (> 4 Tcf)
disc 97-01
prod >2015



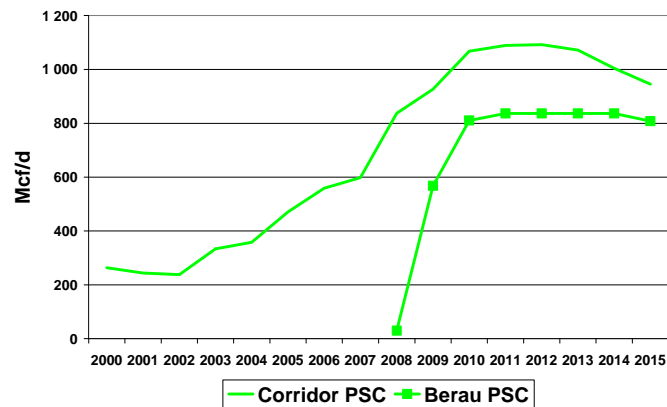
Indonesia



Data from WoodMackenzie



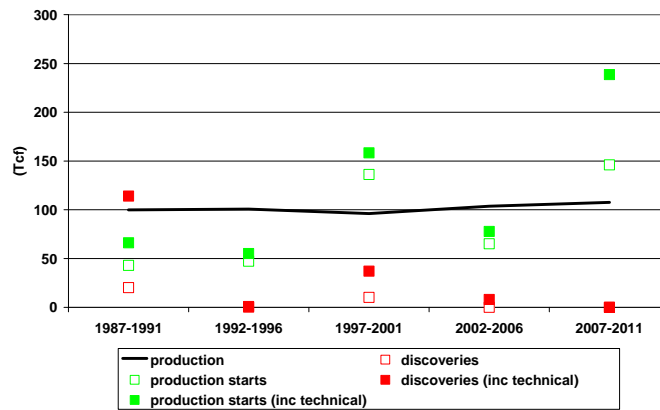
INDONESIA



Data from WoodMackenzie



West Siberia



Data from WoodMackenzie

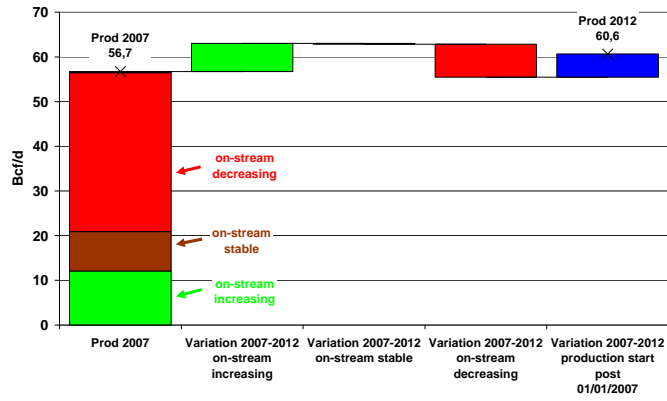


Bovanenkovo (> 100 Tcf)
disc in 1971
prod 2011

Zapolyarnoye (> 100 Tcf)
disc before 87
prod 97-01



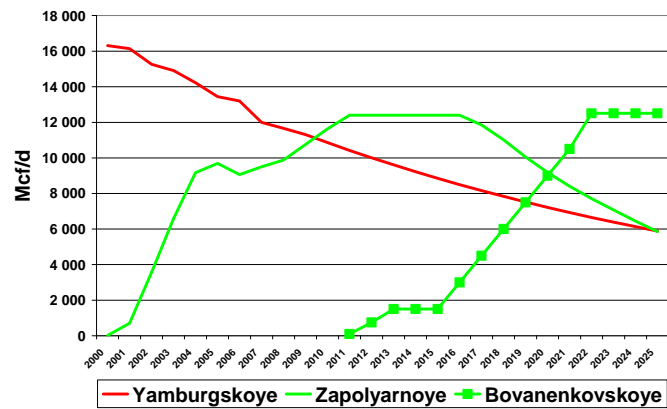
West Siberia



Data from WoodMackenzie



WEST SIBERIA



Data from WoodMackenzie



THESE 7 AREAS SHARE ONE IMPORTANT CHARACTERISTIC:

THE DEFICIT OF DISCOVERIES VERSUS PRODUCTION

THIS WAS NOT THE CASE 20 YEARS AGO



FOR MOST OF THEM THIS RESULTS IN A DEFICIT OF
PRODUCTION STARTS:

THE EXCEPTIONS ARE NORWAY, WEST SIBERIA AND
INDONESIA.

THESE COUNTRIES/AREAS ARE THE ONLY ONE TO SHOW A
SIGNIFICANT SHORT TERM INCREASE OF PRODUCTION



THE ONLY COUNTRY WHERE PRODUCTION WILL DECREASE IN THE NEAR FUTURE IS UK.

IN NETHERLANDS, ARGENTINA, MALAYSIA, THE QUESTION IS ABOUT THE DURATION OF THE PLATEAU: HOW MANY YEARS?

FOR NORWAY, WEST SIBERIA AND INDONESIA, THE QUESTION IS ABOUT THE CAPACITY TO GO ON MEETING FUTURE DEMAND GROWTH IN THE LONG TERM. FOR THIS, EXPLORATION RESULTS NEED TO IMPROVE.



THANK YOU !