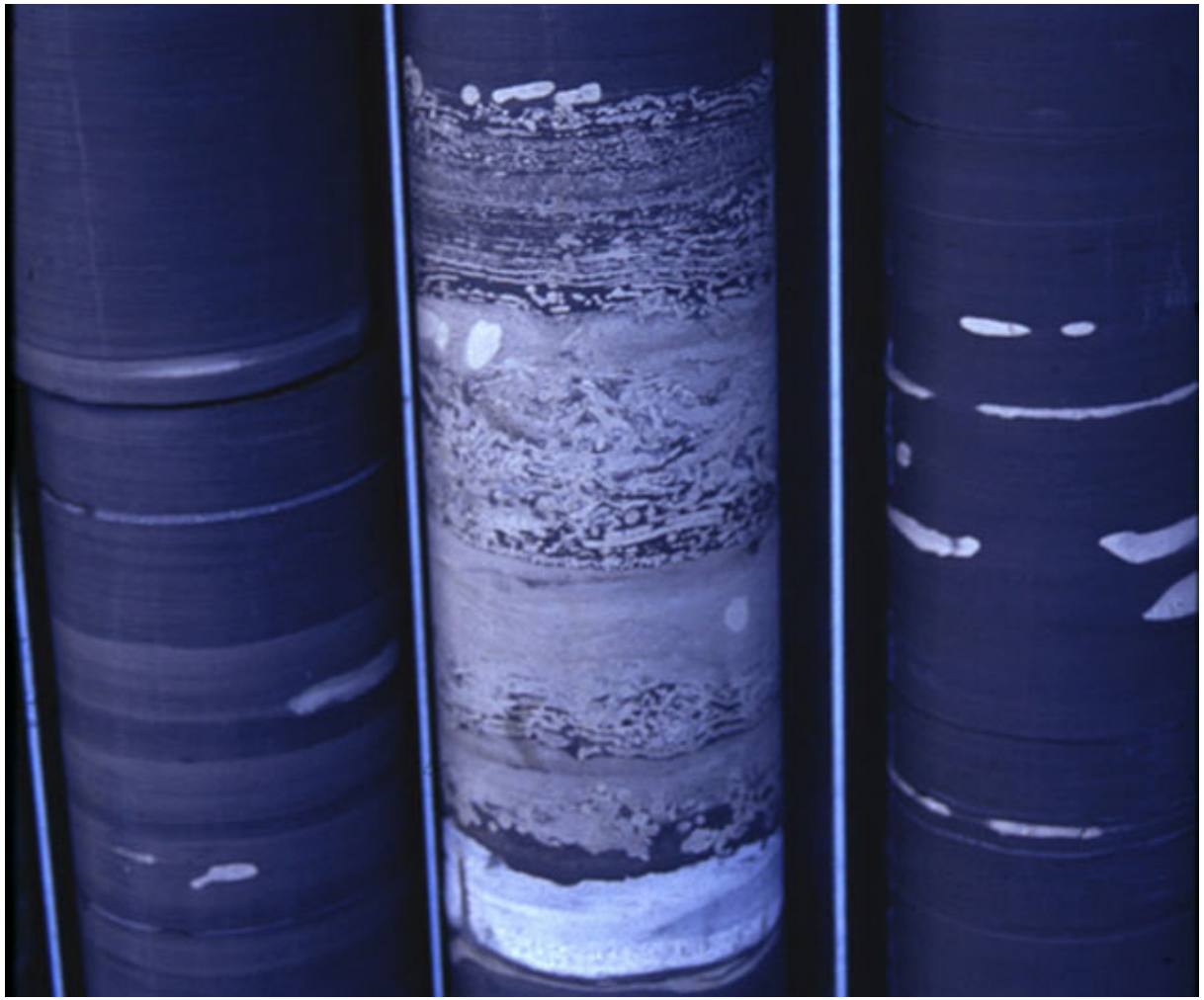
HALLIBURTON

Shale Natural Resources

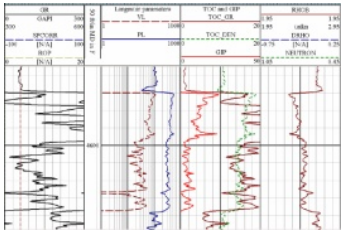
Stephen Ingram

Solving challenges.™

Geology & Geography

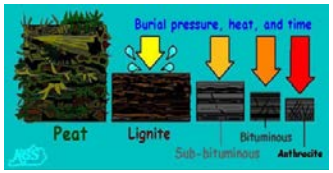


Geology & Geography

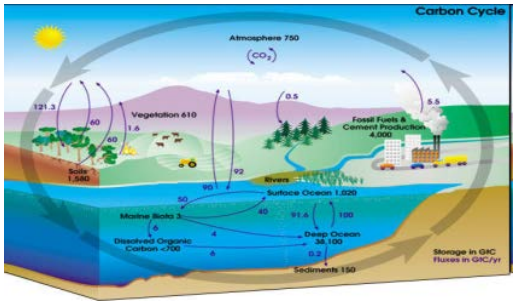


Gas in place (scf/t)

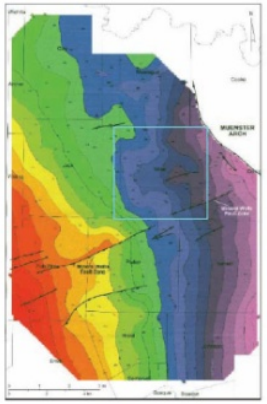
Vitrinite reflectance (R_o)



TOC

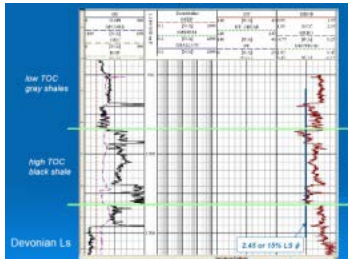


Area sq km



Net Thick. m.

Avg Depth. m



This information is generally available in the published literature

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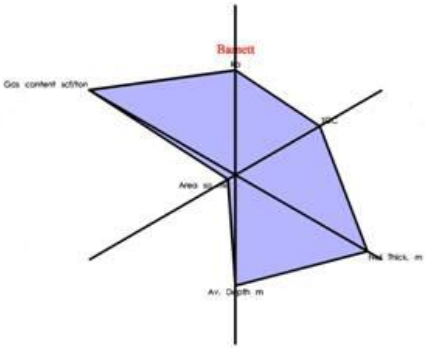
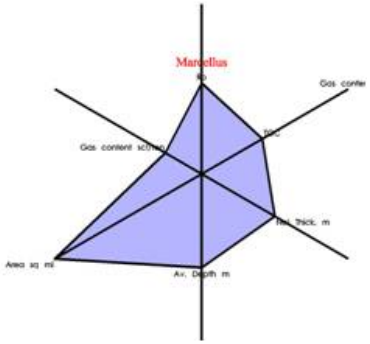
Barnett Shale

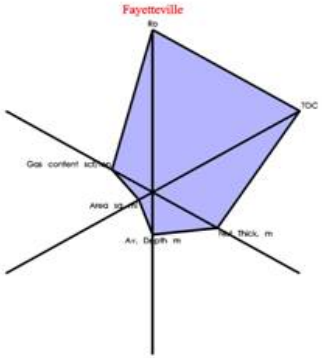


Source: Oil & Gas Financial Journal
August 2009

Marcellus Shale



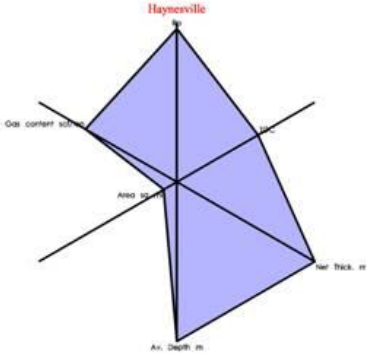
Fayetteville Shale



Source: Oil & Gas Financial Journal
August 2009

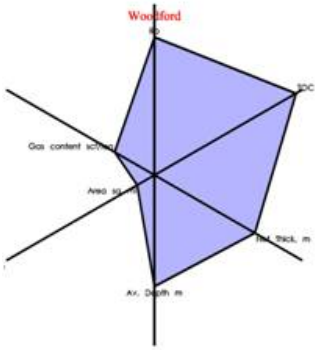
Haynesville Shale

Core



Source: Oil & Gas Financial Journal
August 2009

Woodford Shale



Source: Oil & Gas Financial Journal
August 2009

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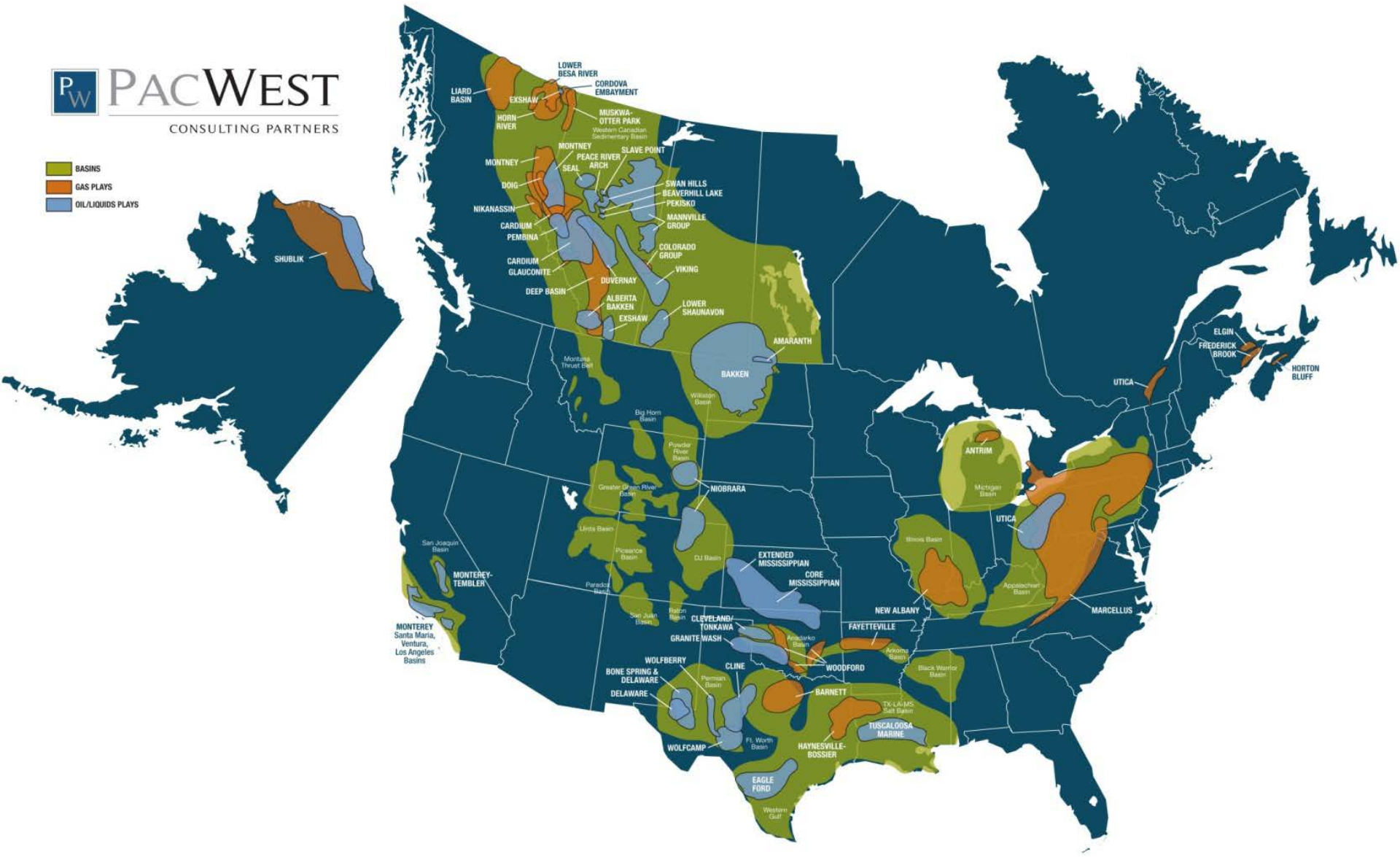
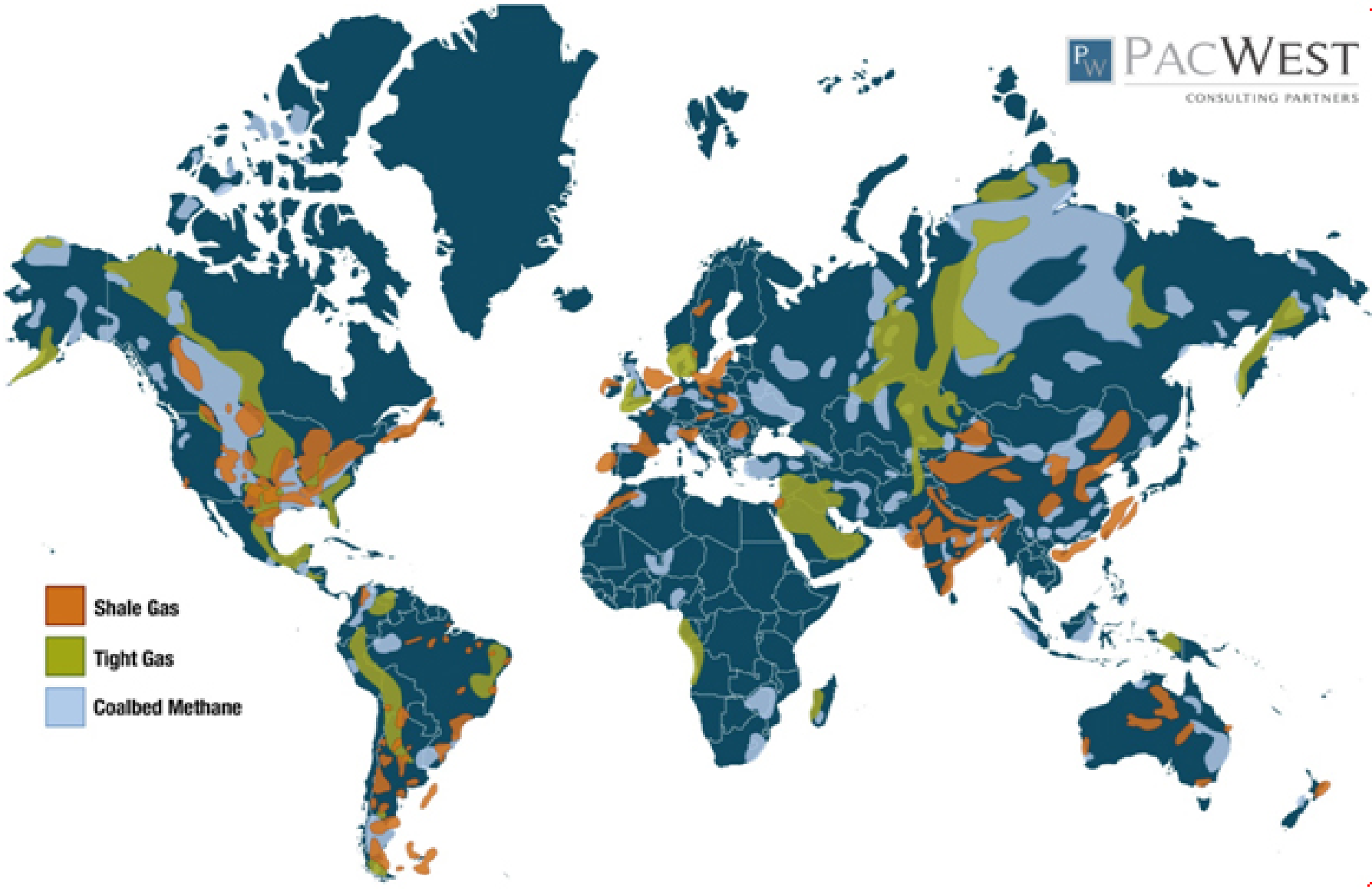
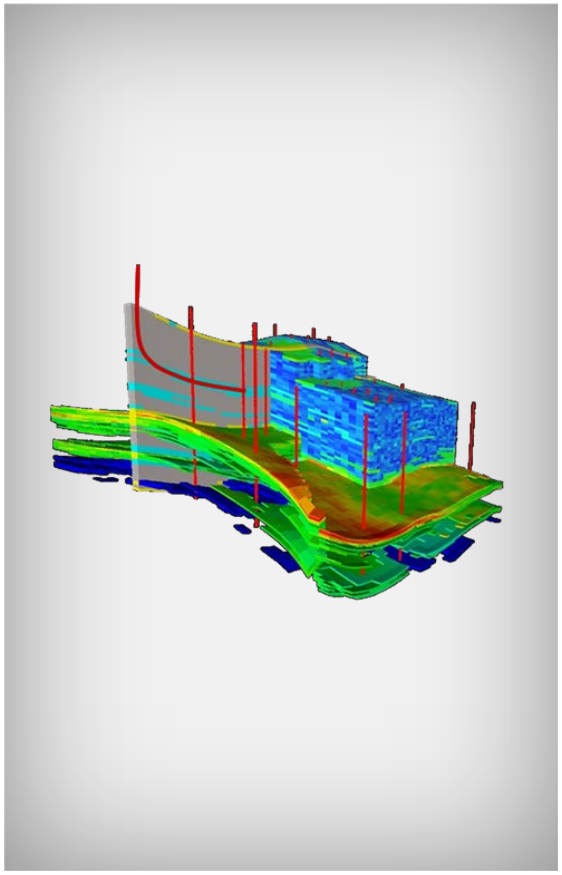


Geology & Geography

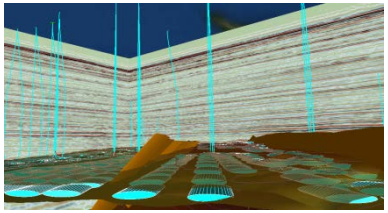


Technology

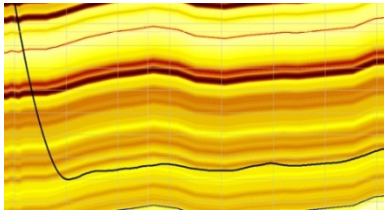
Advancements Deliver Possibility



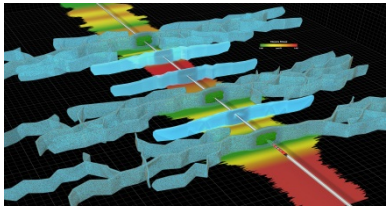
PREDICTIVE MODELING



EFFECTIVE PLACEMENT



DRILLING & STEERING



FRACTURING ENHANCEMENTS

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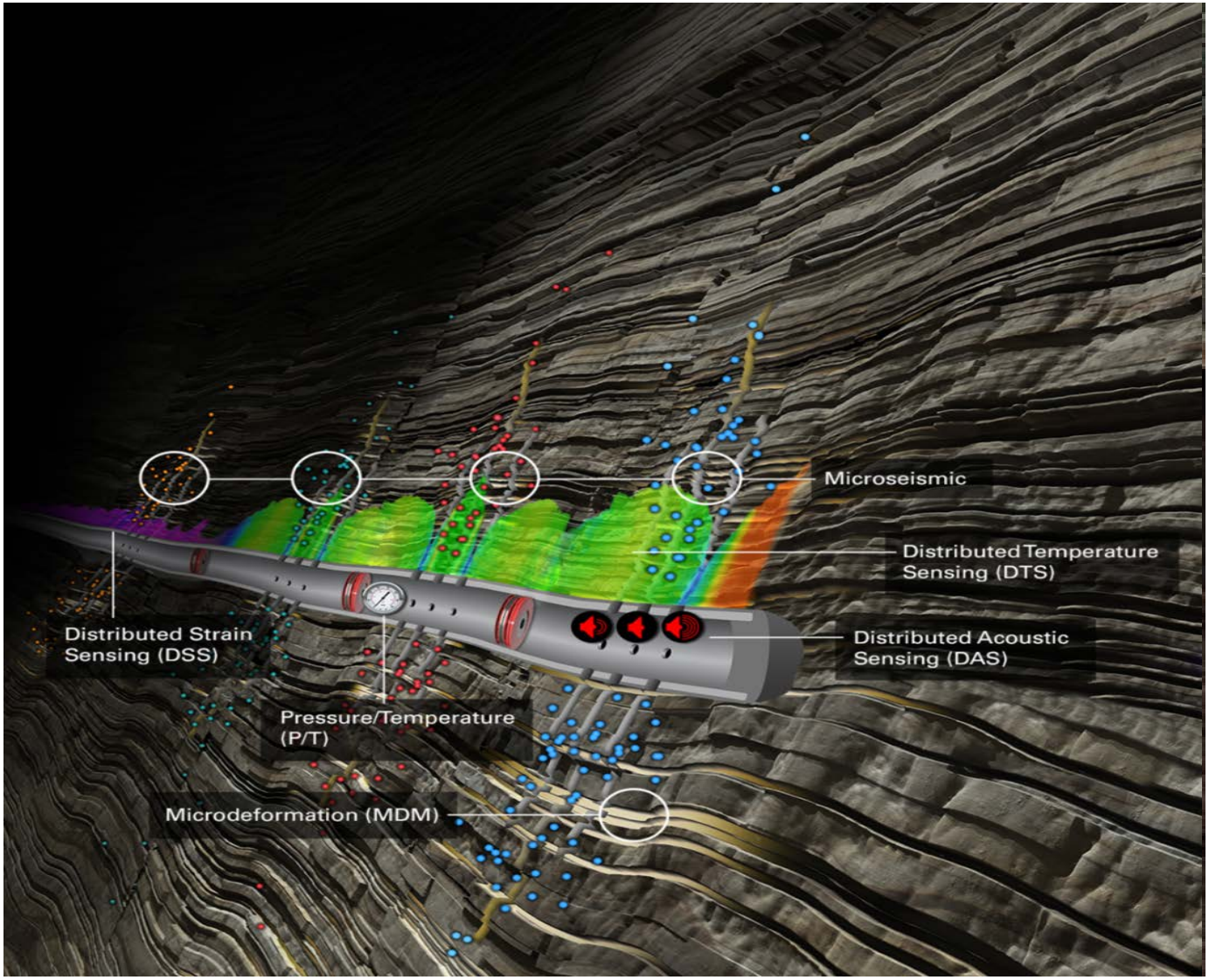
Technology



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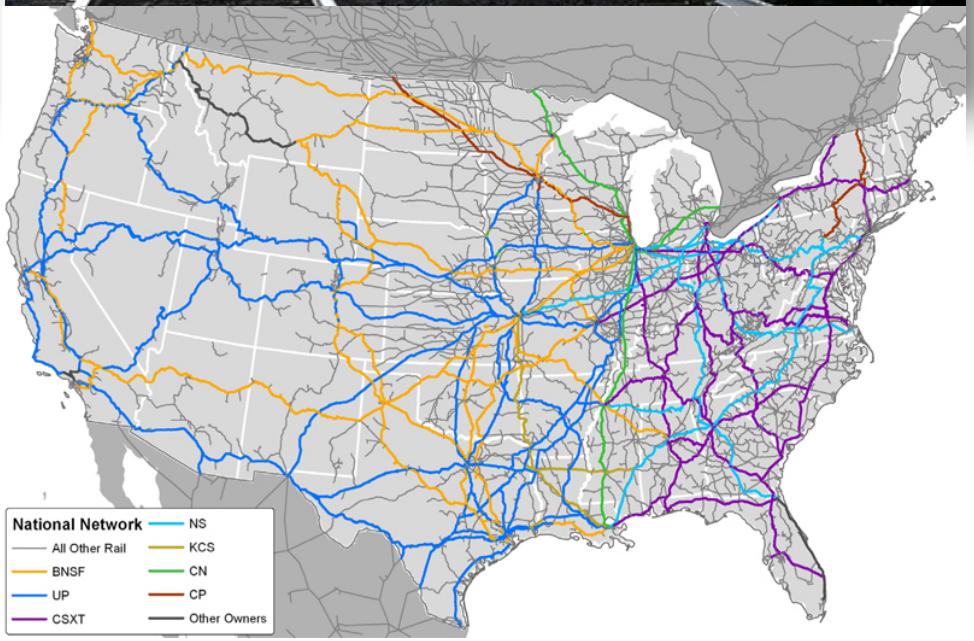
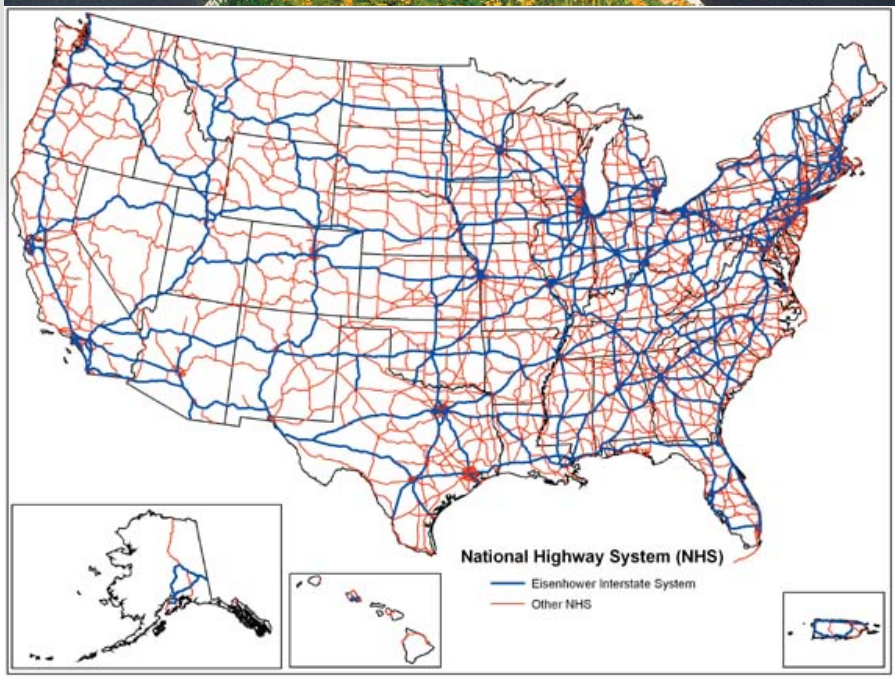
Infrastructure





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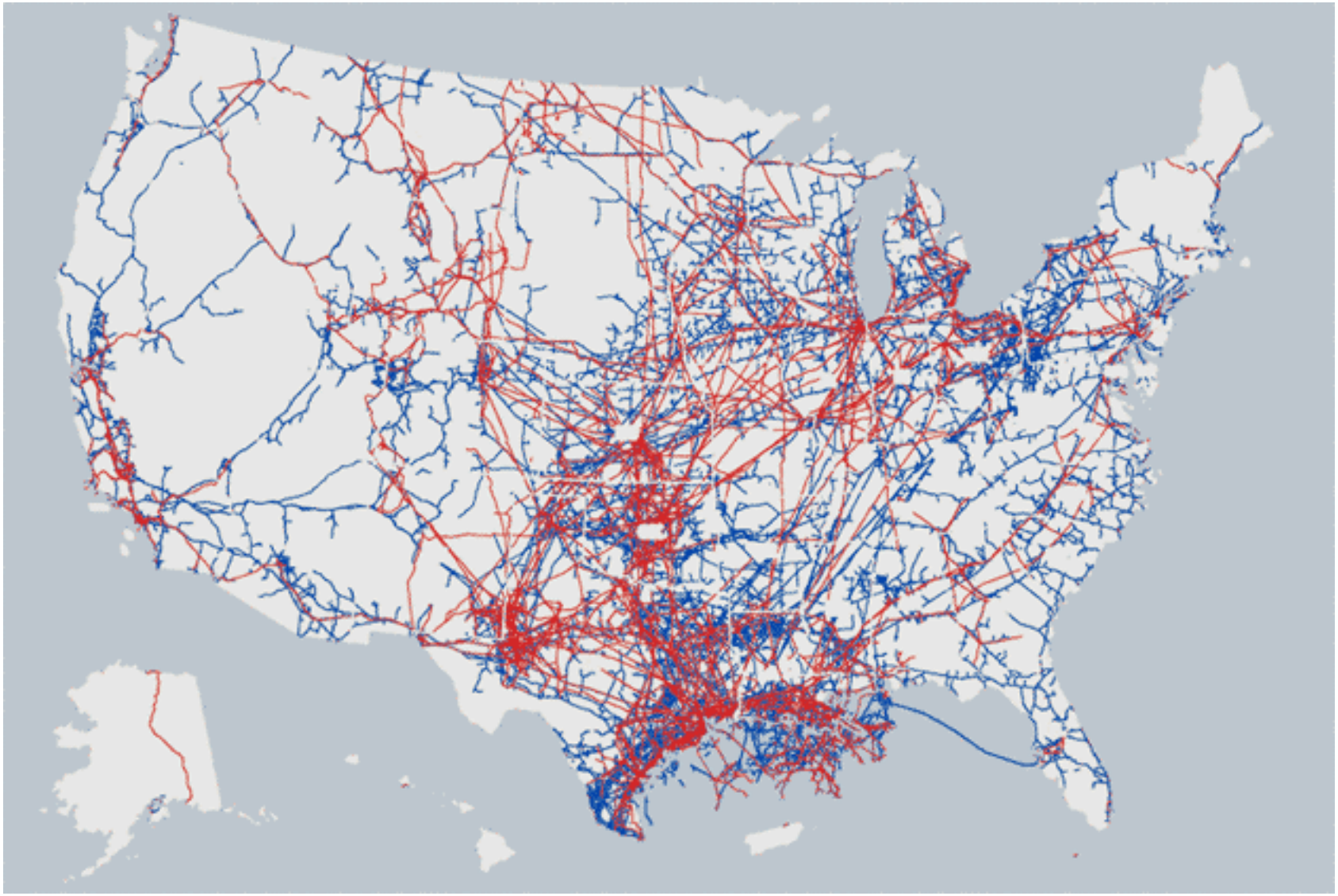
Infrastructure



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Infrastructure

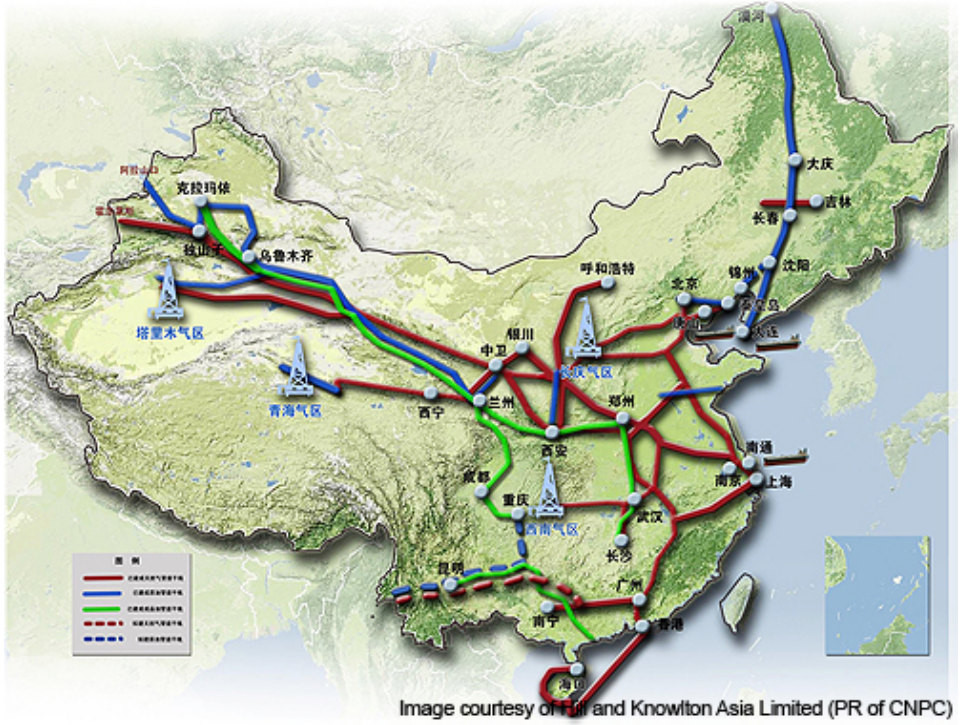
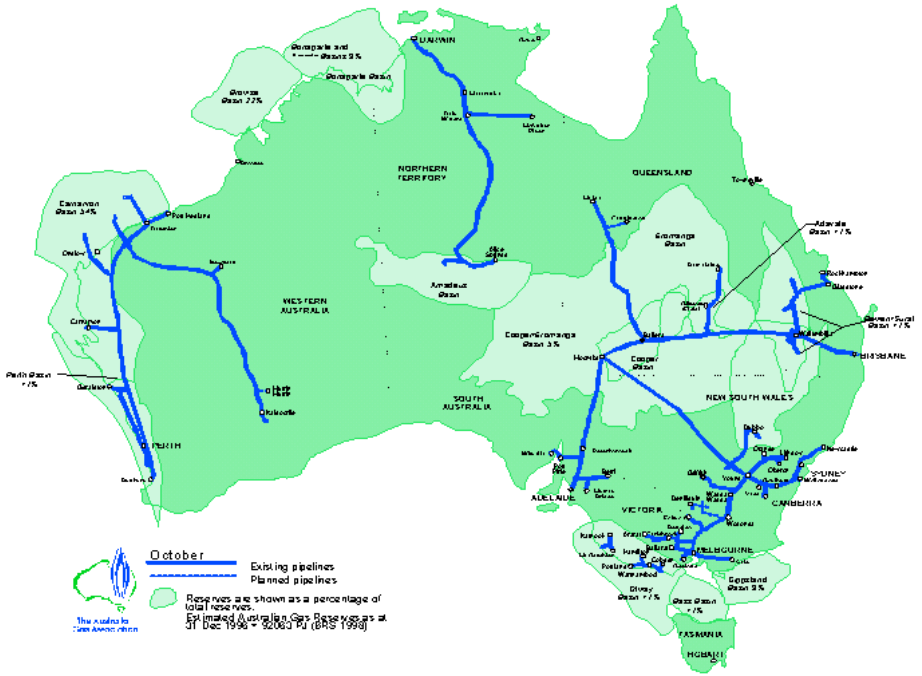


Image courtesy of Hill and Knowlton Asia Limited (PR of CNPC)



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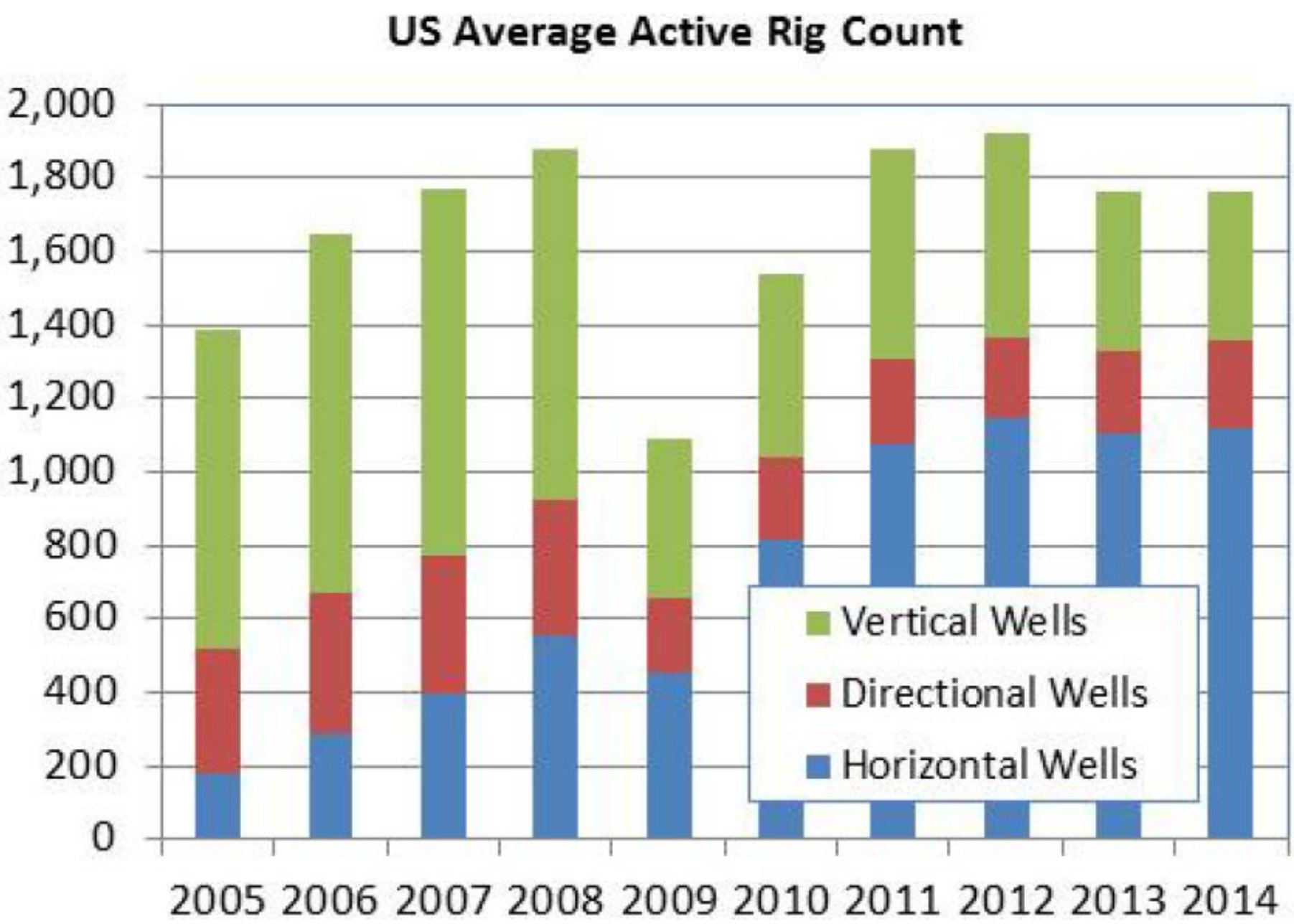
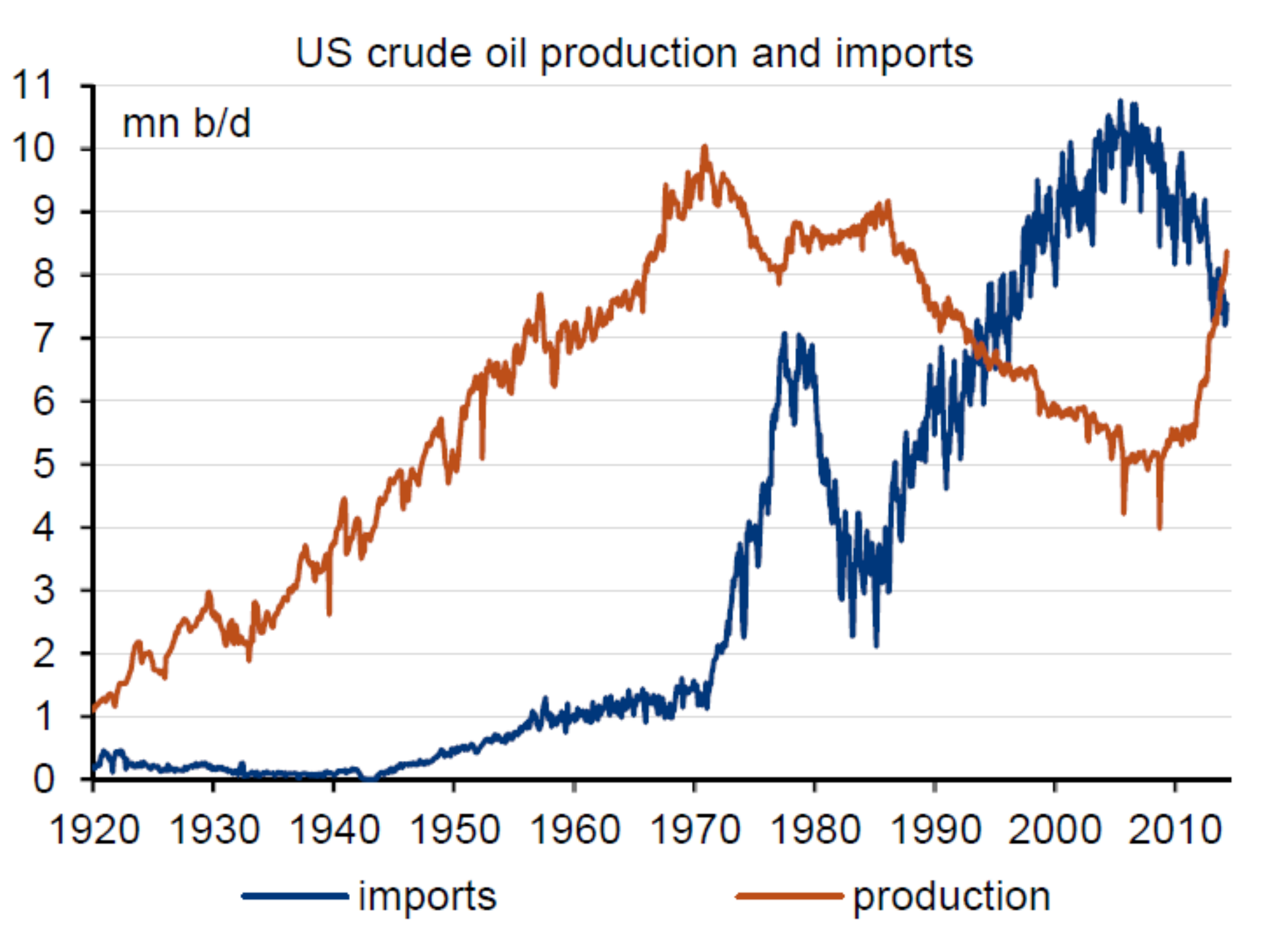
Political / Social


US Average Active Rig Count
2,000
1,800
1,600
1,400
1,200
1,000
800
600
400
200
0
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
Vertical Wells
Directional Wells
Horizontal Wells


US crude oil production and imports
mn b/d
11
10
9
8
7
6
5
4
3
2
1
0
1920
1930
1940
1950
1960
1970
1980
1990
2000
2010
imports
production

Thank You

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