# A Tale of Two Resources

## US Offshore Oil and Gas
- First "offshore" drilling?  
  - 1896
- First production?  
  - 1897
- Standard block size in GoM?  
  - 5,760 acres
- Lease terms in years for last sale?  
  - 5, 5+3, 7+3, 10

## US Offshore Wind
- First offshore wind project proposed?  
  - 2001
- First lease awarded?  
  - 2010
- First production?  
  - December 2016
- Average lease size?  
  - 107,244 acres
- Lease terms in years for last sale?  
  - 1+5+25
Same Lessor, Different Leasing Process

- Non-competitive
  - Negotiate lease with BOEM

- Competitive
  - Blind, ascending, online auction
    - BOEM sets bid at each round
      - Normally 10 minutes between rounds

  bidder 1 bidder 2 bidder 3
  minimum bid $160,000 $160,000 $160,000
  2nd round ($240,000) $240,000 exit bid ($235,000) $240,000
  3rd round ($300,000) $300,000 can't bid chose not to bid

- Minimal MLOT
Same Lessor, Different Lease

• Renewable energy lease
• June 8, 2017: Apparent high bidder
  – July 7, 2017: DOJ antitrust review
    • 10 days to sign lease, submit financial assurance after receive lease
• 1 year from effective date to submit site assessment plan
  – BOEM hasn't denied an extension request yet
• 4 ½ years from approval to submit construction and operations plan
• 25 years from approval for operations
Related Manufacturing

- **Turbines**
  - Largest made in the US: 4 MW
    - 6 MW in the water
    - Only expected to get larger

- **Substructures**
  - Floating: proprietary solutions
  - Fixed
    - Jackets
      - Similar to oil and gas jackets, manufactured in US
    - Monopiles
      - US does not currently manufacture for offshore wind
      - Diameters great than 30 feet
Federal Waters/State Influence

Legend
- Non-competitive Leases Awarded
- Lease(s) Awarded via Lease Sale
- Unsolicited Lease Applications Pending

• RPS: 50% by 12/31/30
  • Floating

• RPS: 100% by 2045
  • Floating

• CES: 50% by 2030
  • 2.4 GW OSW by 2030
  • Fixed bottom

• RPS: 15% by 2020
  • 1.6 GW OSW by 2027
  • Fixed bottom/Floating

• RPS: 10% by 2018 (municipal utilities);
  12.5% by 2021 (investor owned)
  • Fixed bottom

5 June 2017 Classification: Open © Statoil ASA
New York: A Different Ballgame

• Lease sale
  - State of New York was bidding
    • Received 10% non-monetary credit
    • Winner had the right to revoke bid in favor of New York
  - Previous high bid was $8.7 million for 2 leases

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<th>Rank</th>
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<td></td>
<td>wpd offshore Alpha LLC</td>
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Potential Game Changers

• If you build it, they will come
  - Supply chain
    • OSW turbine suppliers manufacturing in the US
    • Substructures can be built in the US
    • US flagged vessels

- Create jobs
- Decrease OSW costs
- Less reliant on subsidies