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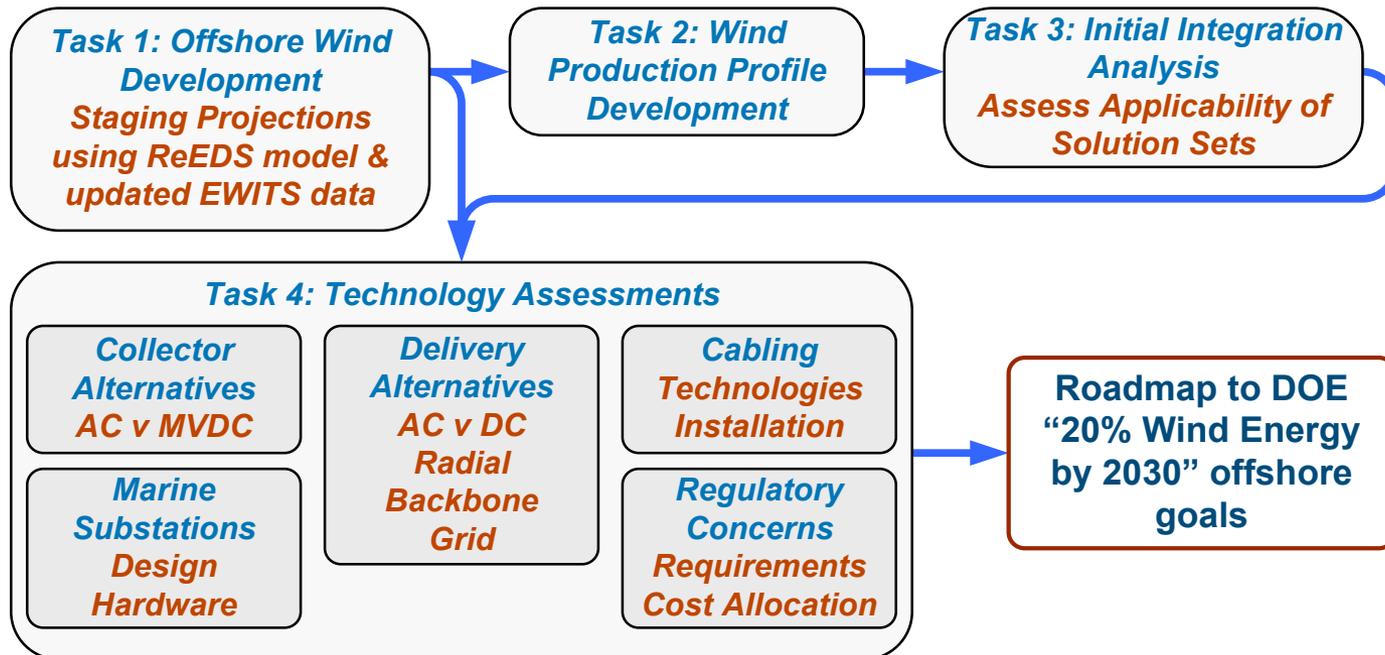
# An Overview of NOWEGIS Results

# NOWEGIS Study Team



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## Project Overview



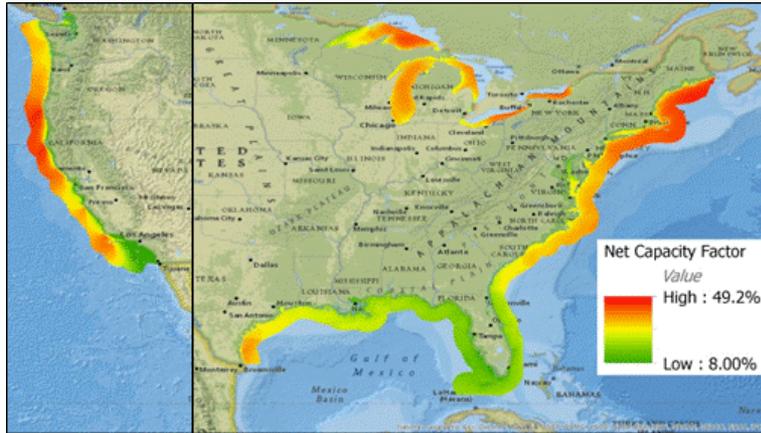
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## Key Results

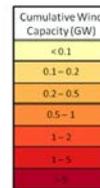
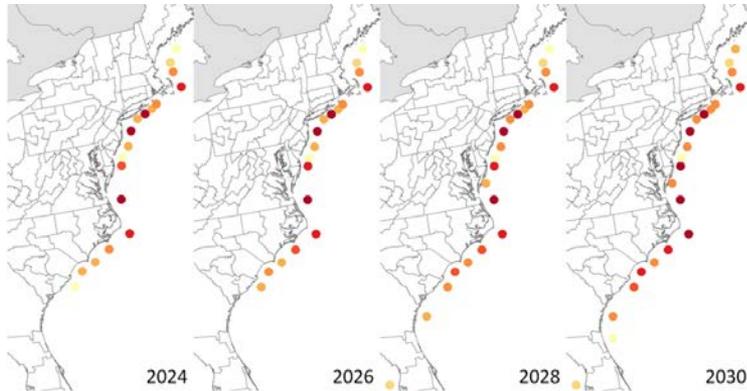
- The US has sufficient offshore resources for at least 54 GW of offshore wind
- Study methods for terrestrial wind integration are appropriate for offshore wind
- Technologies exist for large scale offshore wind integration
- At regional or national level, offshore wind may provide significant value
- Appropriate state and federal policies and permitting are critical to achieving potential value of offshore wind
- Research and development show promise for reducing initial capital investment

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US has sufficient resources for at least 54 GW of offshore wind

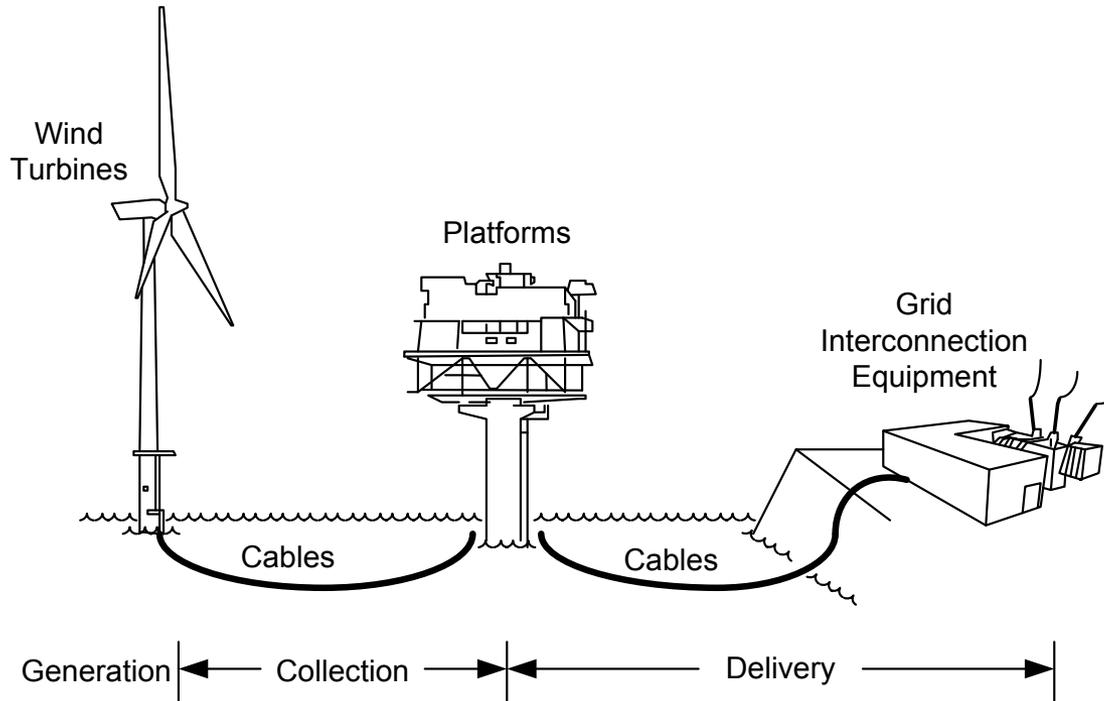


209 Low cost of energy sites identified for use in study



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## Technologies exist for offshore wind integration



- AC v DC
- Cables
- Platforms
- Topology options
- DC converter options

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## Offshore wind energy may provide significant value

- Production Cost Assessment

Case Description	Installed Offshore Wind Capacity (GW)	Price of CO <sub>2</sub> Included?	Gas Price Multiplier	Production Cost Savings (B\$)	Offshore Wind Generation (TWh)	Value of Offshore Wind (\$/MWh)
Base Case	54	No	1.0	7.68	187.6	40.9
With Price of CO <sub>2</sub>	54	Yes	1.0	10.02	187.6	53.5
High Gas Price	54	No	1.2	8.89	187.6	57.4
Low Gas Price	54	No	0.9	7.18	187.6	38.3
Low Offshore Wind Penetration	27	No	1.0	4.26	97.0	43.9
Low Offshore Wind Penetration	16	No	1.0	2.65	57.8	45.8

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## Regulatory Environment

- State policies that recognize the energy, environmental and economic benefits of offshore wind are critical to encouraging investment.
- Reductions in the federal permitting and siting process are critical to achieving gigawatt scale offshore wind deployment
- Current organizational structures in the US may make it more difficult to attain levels of offshore wind considered in the study

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## Contact Information

- Report can be found at

<http://energy.gov/eere/downloads/national-offshore-wind-energy-grid-interconnection-study-nowegis>

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