

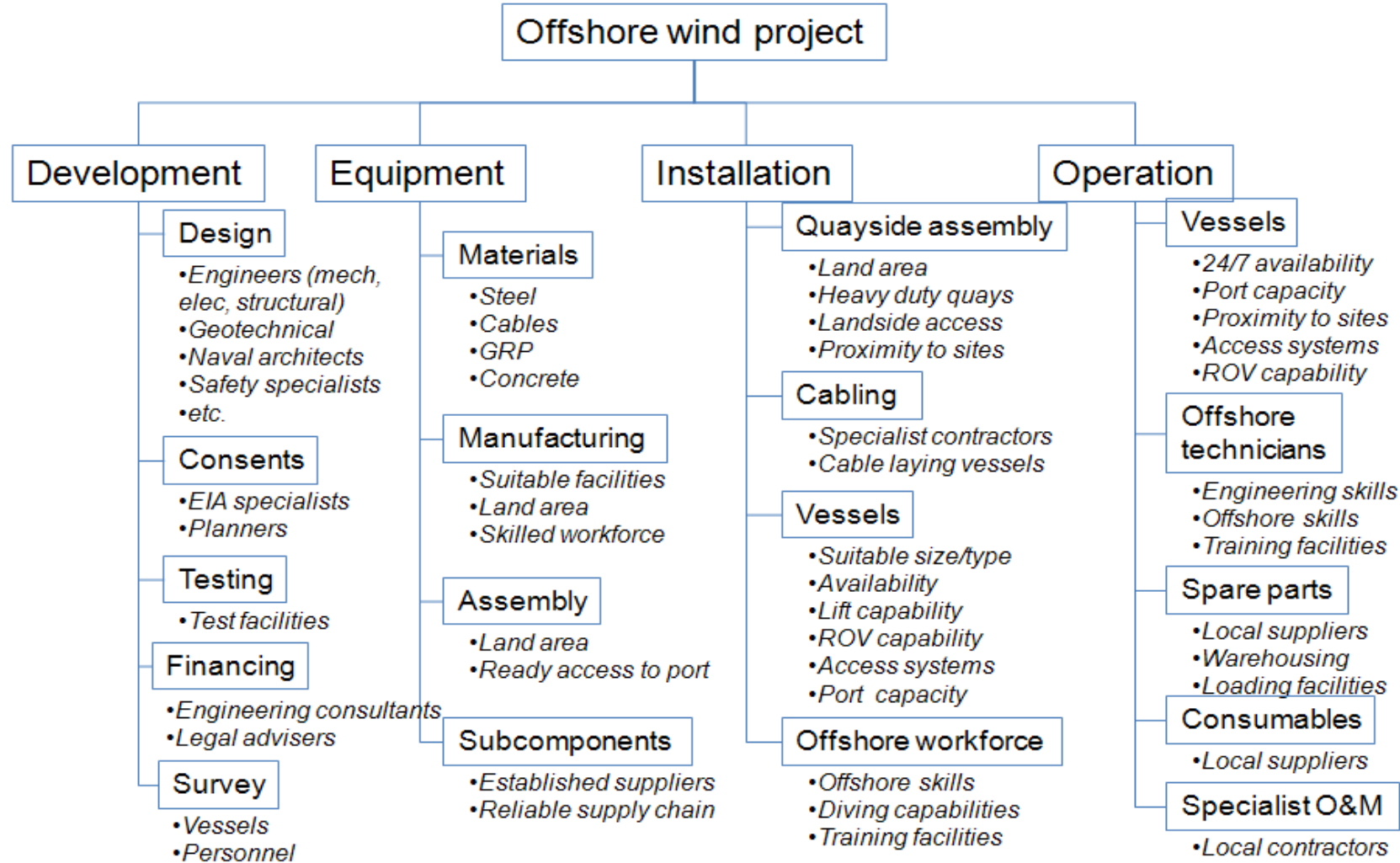
Virginia's Offshore Wind Opportunity

Supply Chain Development Outlook and Strategy



Growing the 757. Growing Virginia.

Offshore Wind Supply Chain Opportunities



OEMs & Tier 1 Companies



Wind Turbine Generators	Cables	Towers	Foundations & Transition Pieces	Blades	Substations
GE	Nexans	Marmen	Bladt	Vestas	Semco
SGRE	Prysmian	Ventower	Smulders	LM Wind Power	Kiewit
Vestas	NKT	Broadwind	EEW	Aeris Energy	
	LS Cable	GRI	Sif	TPI Composites	
	TF Kable / JDR	CS Wind	Steelwind	SGRE	
	Hellenic Cables	Haizea	Navantia		

Competitive Landscape - State Goals



- Other states have larger offshore wind goals than Virginia, which will likely drive much early supply chain investment to those states.

State	Target (MW)	Goal Year	Amount Procured (MW)
Massachusetts	5,600	2035	3,236
Rhode Island	Up to 1,000	2033	430
Connecticut	2,000	2030	1,104
New York	9,000	2035	4,362
New Jersey	11,000	2040	3,758
Maryland	8,500	2031	2,022
Virginia	5,200	2032	2,652
North Carolina	8,000	2040	0

Competitive Landscape - Port Infrastructure



- Port infrastructure is becoming less of a differentiator for Virginia. States and private entities are investing approximately \$1.5B in port development along the East Coast.

	Available Acreage	Federal Investments	State Investment (to date)	Private Investments
New Bedford – MA	29 Acres		\$113M	\$32M (Vineyard and Mayflower)
Salem – MA	42 acres	\$34M (DOT Grant)	\$100M	\$75M (estimated)
Brayton Point – MA	300 acres			\$650M (Anbaric Partners)
Prov Port – RI	20 acres		\$35M (South Quay)	\$40M
Quonset – RI	60 acres		\$60M	\$234M (Master plan)
New London – CT	25 acres		\$180M	\$75M
Bridgeport– CT	20 acres	\$10.5M		
South Brooklyn Marine Terminal – NY	111 acres		\$57M	\$200M-\$250M
Port Jefferson – NY	Small O&M Hub		Part of state total of \$750M	\$10M
Port of Albany – NY	80 acres	\$29M	Part of state total of \$750M	\$350M
Port of Coeymans – NY	80 acres		Part of state total of \$750M	\$86M
Arthur Kill Terminal – NY	32+ acres	\$48M		
WindPort – NJ	221 acres		\$200M - \$300M	In negotiation
Paulsboro– NJ	200+ acres		\$250M	\$250M
Tradepoint Atlantic – MD	90+ acres		\$13M	\$150M
Sparrows Point – MD	3000 acres			
Fairwinds Landing – VA	110 acres			
Portsmouth Marine Terminal - VA	287	\$20M	\$40M	\$200M

Competitive Landscape - Supply Chain Announcements



Component	Location	State	Investor	FTE	Status	\$ Announced
Blades	Portsmouth	Virginia	SGRE	310	Announced	\$200M
Blades	Port of Coeymans	New York	GE	650	Announced	TBD
Nacelles (assembly only)	Wind Port	New Jersey	Vestas	TBD	Announced	TBD
Nacelles (assembly only)	Wind Port	New Jersey	GE	TBD	Announced	TBD
Nacelles	Port of Coeymans	New York	GE	220	Announced	TBD
Towers & Transition Pieces	Port of Albany	New York	Marmen Welcon / Smulders	550	Construction	\$350M
Monopiles	Paulsboro	New Jersey	EEW	500	Construction	\$250M
Monopiles	Sparrows Point	Maryland	US Wind	200	Announced	\$150M
Foundation Components	Providence	Rhode Island	Eversource/Orsted	40	Construction	\$40M
Secondary Steel	Port of Coeymans	New York	Eversource	230	Announced	\$86M
Cables	Charleston	South Carolina	Nexans	210	Operational	\$200M
Cables	Sparrows Point	Maryland	Hellenic Cables	300	Announced	\$140M
Cables	Brayton Point	Massachusetts	Prysmian	250	Announced	\$200M
Offshore Substations	Ingleside	Texas	Kiewit	Not Announced	Operational	Not Announced

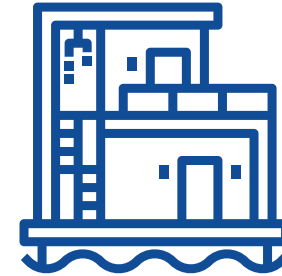
Virginia's Strengths



Unmatched Port Infrastructure



Large & Skilled Maritime Workforce



Terminal Facilities & Waterfront Sites



America's Largest Shipbuilding Industry

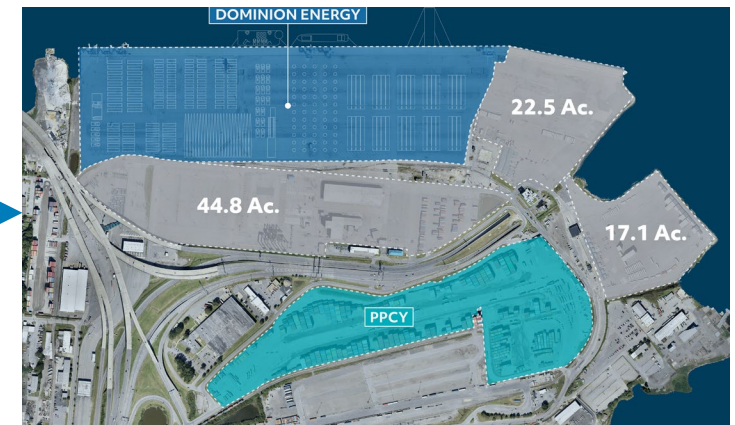


Pro-Business Climate



Strategic Location

Offshore Wind Port Infrastructure



OSW Project Pipeline



- Virginia partners are working several large active projects.
- Two projects have received incentive proposals. These projects represent:
 - Approximately \$1.2B in capital investment
 - 950 high-wage jobs

OSW Supply Chain Strategy



- A. Support and attract anchor manufacturers around which to build one of the offshore wind industry's supply chain hubs.

- B. Develop terminals to ensure Hampton Roads is the construction port for multiple Mid-Atlantic offshore wind projects.

Contact Information



Matt Smith

Director of Energy and Emerging Technology

Email:

msmith@hamptonroadsalliance.com

Phone:

757.355.1136



Growing the Virginia Supply Chain.

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