

Offshore Wind in Maryland: Creating a Project, Not Just A Policy



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MARYLAND ENERGY
ADMINISTRATION**



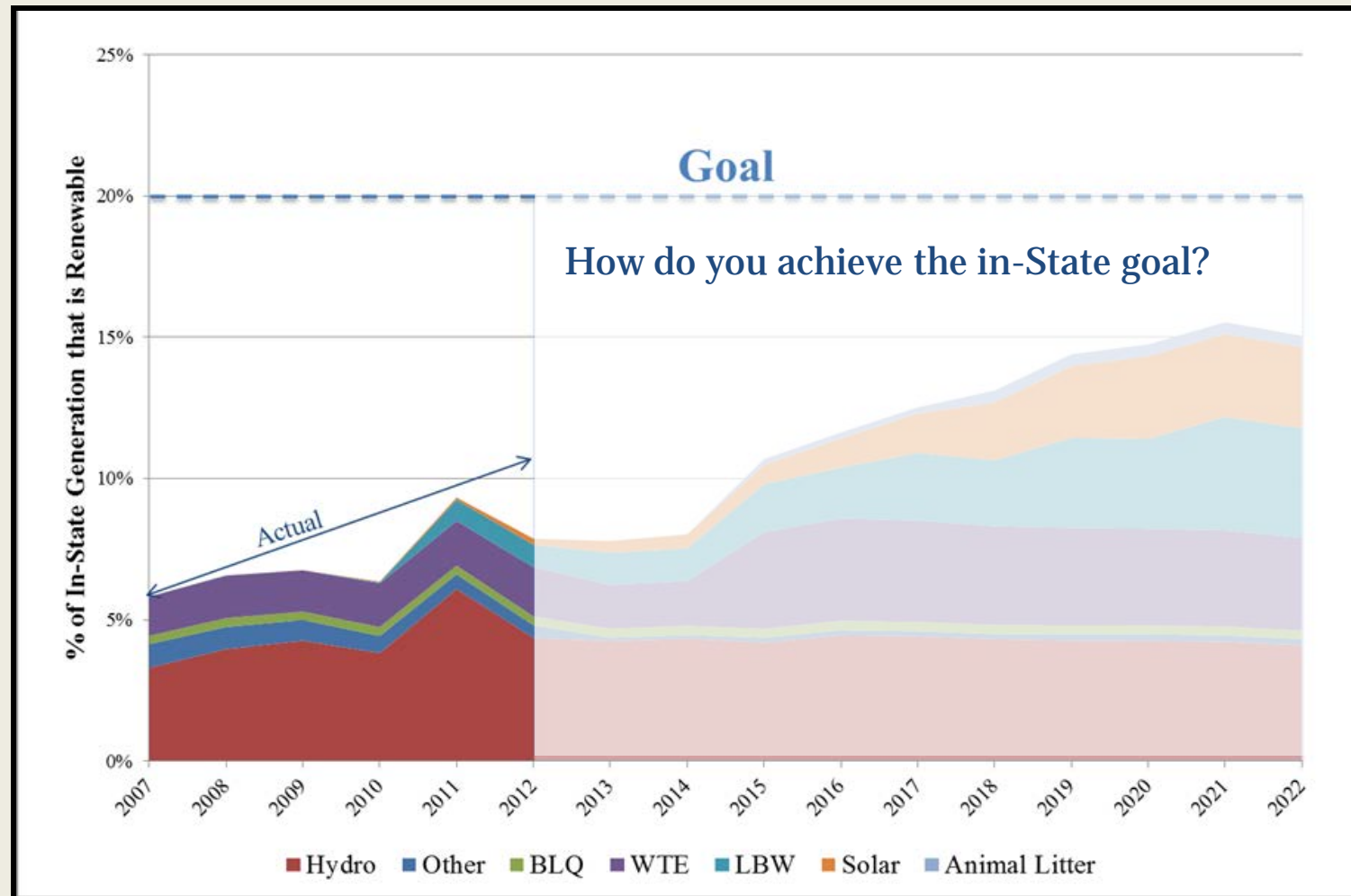
Governor O'Malley's 15 Strategic Goals

Three focus on Clean Energy and Climate

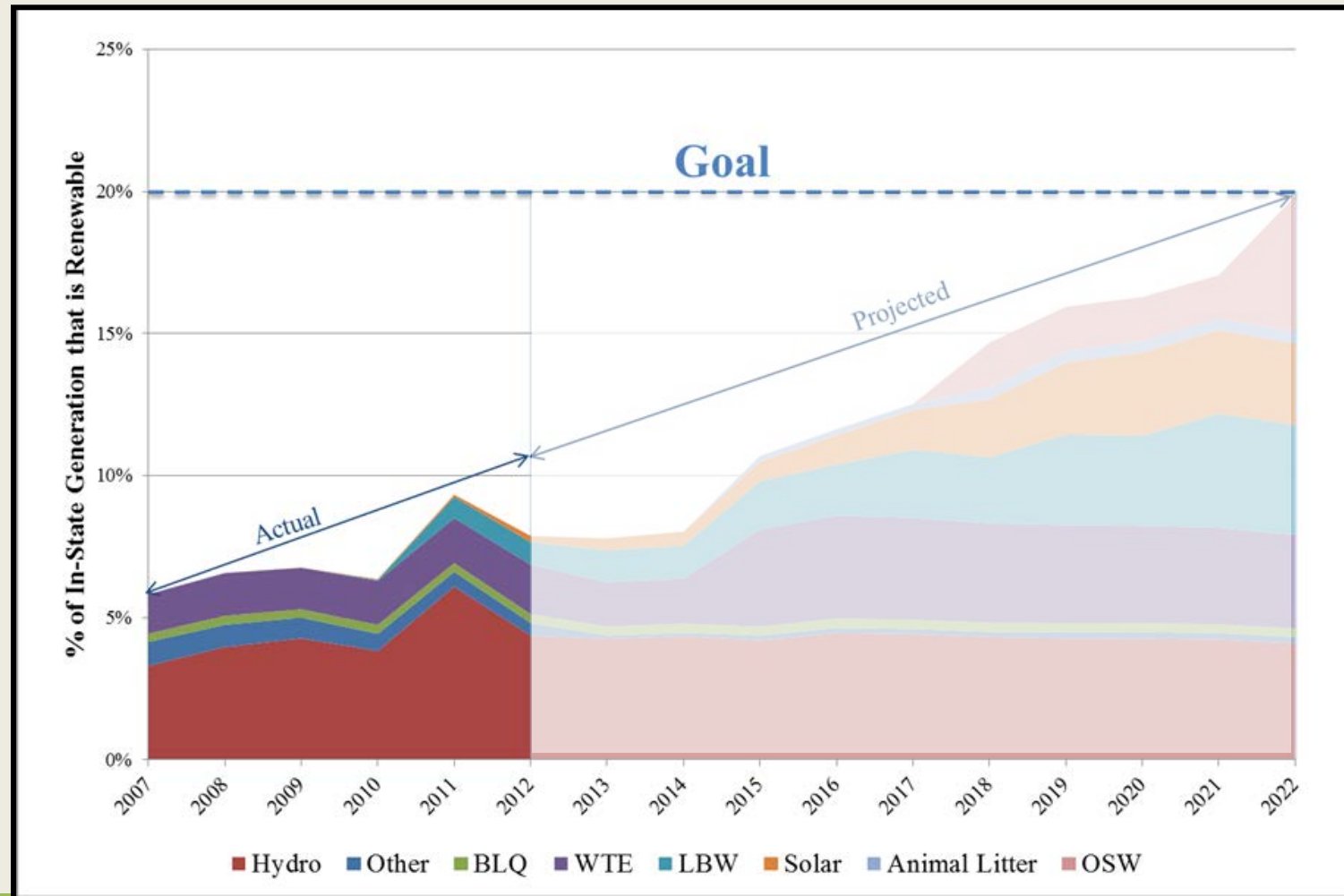


- **EmPOWER Maryland:**
 - *15% energy reduction, both for per capita and peak demand by 2015*
- **Greenhouse Gas Emissions Reduction:**
 - *25% reduction in GHG by 2020*
- **Renewable Portfolio Standard:**
 - *20% renewable energy by 2022*

20% In-State Goal



20% In-State Goal



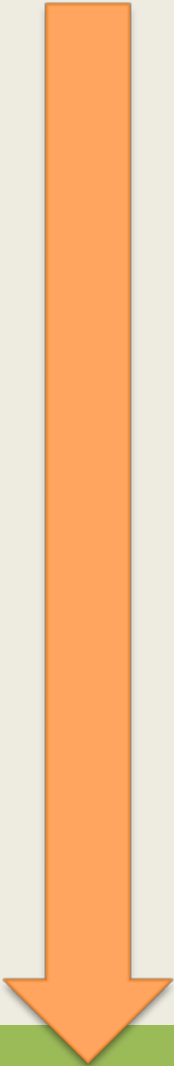
April 9, 2013

Maryland Offshore Wind Energy Act of 2013



Offshore Wind Milestones (2013-2019)

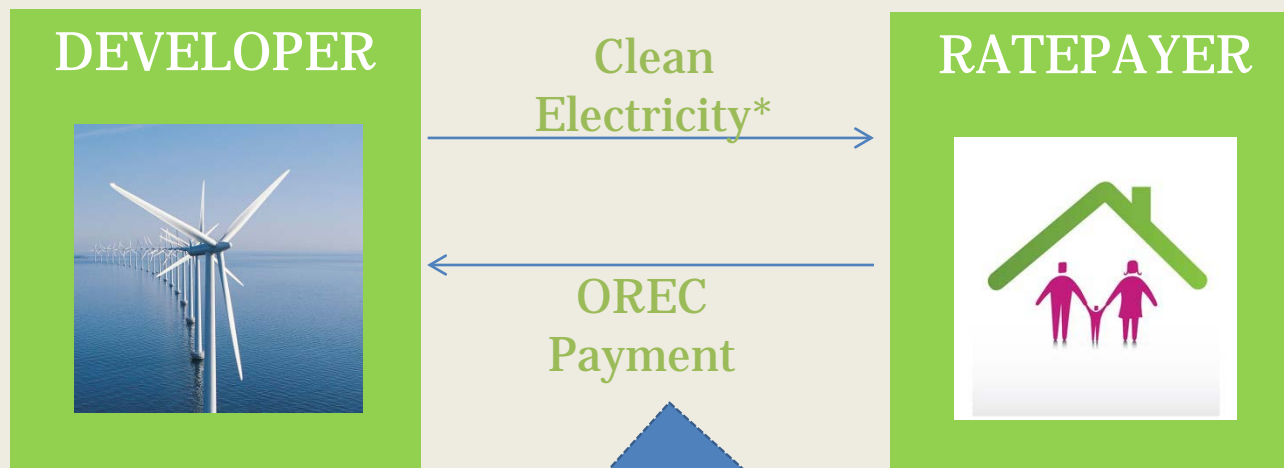


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- A large, solid orange arrow pointing downwards, positioned on the left side of the slide, spanning most of the height of the content area.
- **BRI Baseline Biodiversity Surveys**
 - **MD Geological Survey Nearshore Geophysical Survey**
 - **BOEM issues Proposed Sale Notice**
 - **Geophysical Mapping Expedition**
 - **PSC developers regulations to implement MOWEA**
 - **Final Sale Notice**
 - **Auctions/Leases are awarded**
 - **DOJ/FTC review of leasing process**
 - **Establish Geotechnical Assistance Grant Program**
 - **Establish Met Tower Grant Program**
 - **Developers offer OREC proposals to PSC**
 - **PSC consultant evaluates proposals**
 - **MRI biodiversity maps ready**
 - **PSC issues OREC order**
 - **MEA awards Geotechnical Assistance Grant**
 - **Developer conducts geotechnical characterization**
 - **Developer prepares Site Assessment Plan (SAP)**
 - **BOEM reviews/approves SAP**
 - **MEA awards Met Tower Grant**
 - **Developer installs Met Tower**
 - **Developer gathers Met data**
 - **Developer prepares, submits COP**
 - **BOEM prepares EIS**
 - **Developer constructs project**

Offshore Renewable Energy Credits (ORECs)



Starting in 2018, every year for the following 20 years....



*Clean electricity includes

4 components:

1. Energy
2. Environmental Attribute
3. Capacity
4. Ancillary Services

The difference between the OREC Payment and what the ratepayer otherwise would have paid for regular electricity must not be projected to exceed:

- \$1.50 per month for an average residential ratepayer; and
- 1.5% of annual bill for an average non-residential ratepayer.

The OREC Payment will be determined by the PSC and is subject to a statutory maximum value of \$190.

Offshore Wind: \$1.5/1.5% Threshold



- **Step 1**

- A developer determines the total revenue needed to ensure financing, on a per MWh basis over the 20 year project horizon. This is the OREC price that a developer bids into the competitive process. The OREC price cannot exceed \$190 and includes all four elements of the bundle – the energy, the capacity, the ancillary services, and the environmental attribute.

- **Step 2**

- Developers will sell three elements of the bundle energy, capacity, and ancillary services – into the PJM market. The PSC calculates the difference between the bid-in OREC price and the projected revenues from these three elements of the bundle to determine the net cost of the project.

- **Step 3**

- The PSC calculates how much the net cost of the project would add to an average electricity user's bill in each year of the contract based on conventional energy cost forecasts. If the average monthly cost is projected to exceed \$1.50 in 2012 dollars for the average residential customer in any year during the 20 year project horizon, or 1.5% of an average non-residential customer's bill over the same period, *the project is disqualified.*

Offshore Wind Development Fund



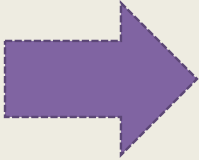
- In settlement of the merger between Exelon Corporation and Constellation Energy Group, Exelon made available \$30 million for the advancement of offshore wind energy off the coast of Maryland.
- MEA plans to use much of this fund to develop meteorological, oceanographic and ecological resource data.



Exelon®



Port Development



Leasing



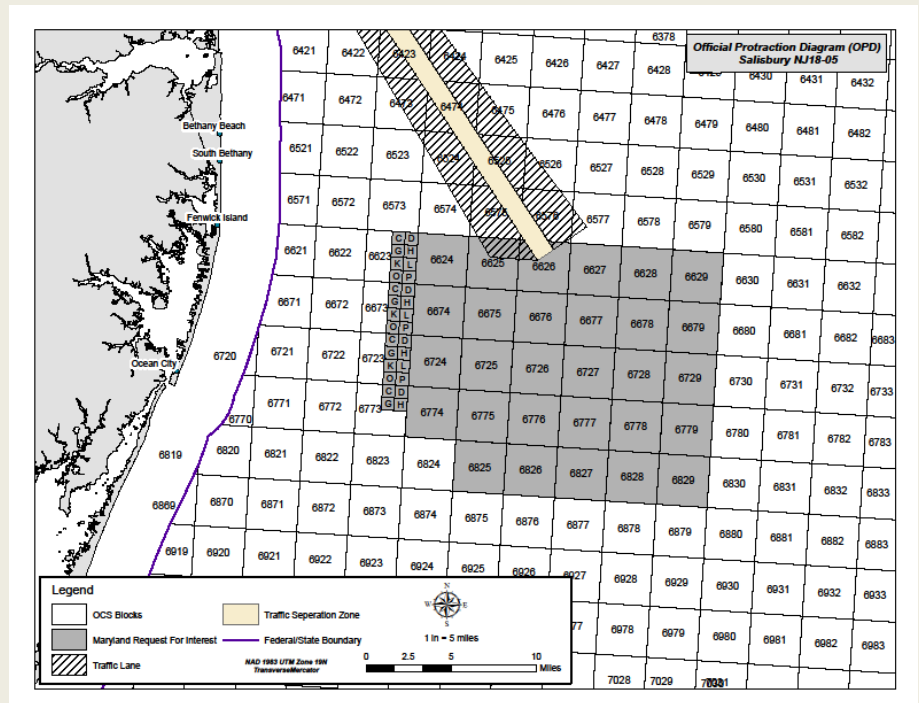
- The Bureau of Ocean Energy Management, Regulation, and Enforcement (BOEMRE) leasing process created a State/Federal Task Force which includes representatives of State and Federal agencies as well as elected officials from affected coastal communities.
- Upon request from Governor O'Malley, BOEMRE convened the first meeting of the Maryland Task Force on April 14, 2010.



Leasing



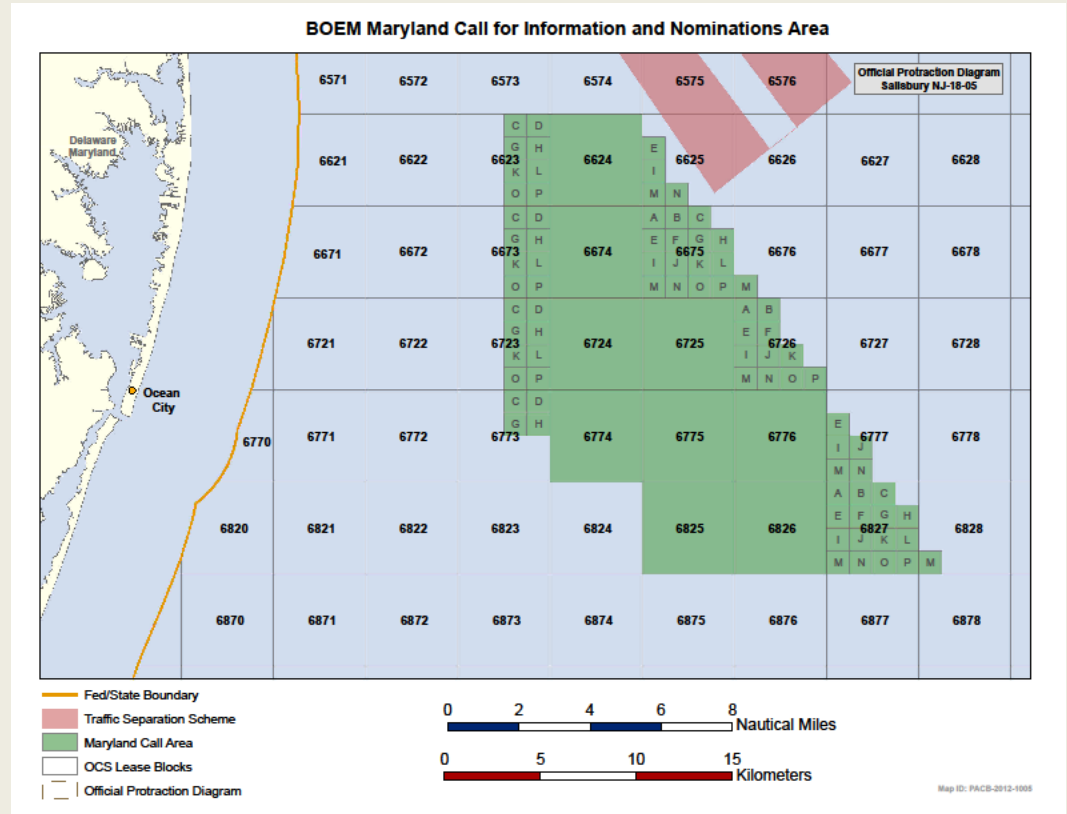
- The Task Force accepted MEA's recommendation and identified a preliminary area of interest. BOEM issued a Request for Information (RFI) for the area in November, 2010.
- 8 Developers expressed interest, including several well-capitalized international renewables firms.



Leasing



- Working with stakeholders to resolve concerns about shipping, MEA recommended a refinement of the Wind Energy Area.
- The Task Force accepted these recommendations and BOEM issued a new “Call for Information and Nominations” in February.



Partnering with the Federal Government

- **Final Sale Notice (BOEM)**
- **Investment Tax Credit – Carper Bill (S. 1397)**
- **Federal Partnership through –
Grants, Power Purchase Agreement
and Loan Guarantee Program**

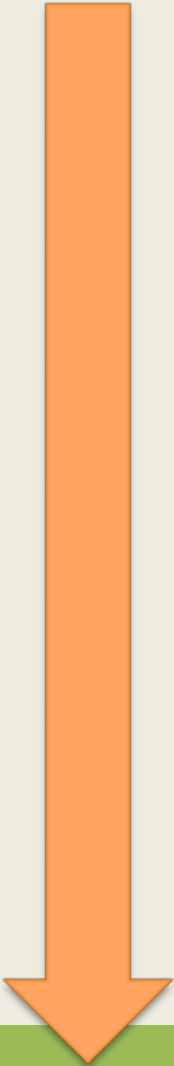
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Offshore Wind BOEM Milestones

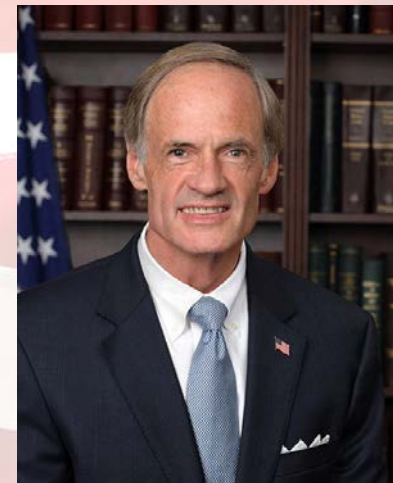


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Federal Government and States Off-Shore Wind Partnership

- **Carper Bill (S.1397)**

- Investment tax credit (ITC) essential for offshore wind development
- American Taxpayer Relief Act of 2012 extended ITC for projects that commence construction before January 1, 2014
 - ✦ But offshore wind project will not begin construction until 2016, at the earliest.
- Carper Bill extends the ITC for offshore wind only and provides consistency for developers.
 - ✦ Credits for first 3,000 MW of offshore wind facilities placed into service, instead of stop-and-go reauthorizations.



Federal Government and States Off-Shore Wind Partnership



- Grants to support joint offshore wind surveys
- Federal funding assistance with the \$14 million required to strengthen piers.
- Broader use of Federal Grants to accommodate the development of Off-Shore Wind projects
 - ✦ TIGER grants too limiting requiring multi-state commitment plus a land and water component



Thank You!



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