

# Policy & Risk Assessment: 2 GW California Wind Energy Lease

Investment by CPP Investments & Reventus Power

# Key Policy and Regulatory Issue: California's Renewable Portfolio Standard, RPS

California's RPS requires retail electricity suppliers to source 60% renewable energy by 2030, with proposals to increase to 100% by 2045.

## Key Data Points:

- Current RPS mandate is 60% renewable energy by 2030
- California met 34% renewable energy in 2020, on track for 60% target
- Proposed legislation would raise RPS requirement to 100% by 2045

## Opportunities:

- Ambitious RPS targets drive strong demand growth for renewables
- Wind energy projected to grow 7% annually to meet 2030 goal

**Impact on CPP Investments/Reventus Power:** RPS-driven demand growth provides upside for wind energy revenues. At a 2GW project size, this suggests room for 7-8 new offshore wind projects of similar scale

**Risk:** Missed targets or potential policy reversals might disrupt the growth trajectory.

**Impact on CPP Investments/Reventus Power:** Regulatory uncertainties can impact projected returns and long-term investment stability.

# Key Policy and Regulatory Issue: Federal Offshore Wind Leasing

BOEM oversees leasing in federal waters, holding auctions for offshore wind development rights. Access to leases critical for offshore wind growth.

## Key Data Points:

- BOEM has held 4 offshore wind lease sales to date. Additional lease sales planned for Gulf of Maine, Central Atlantic, Gulf of Mexico
- The Biden administration has set a goal of deploying 30 GW of offshore wind by 2030.

## Opportunity:

- Provides access to critical federal waters for offshore wind development.
- First mover advantage in emerging US floating offshore market

**Impact on CPP Investments/Reventus Power:** Enhances CPP Investments/Reventus Power's growth potential in offshore wind market. The Morro Bay lease area represents ~80,000 acres, or about 5% of the total leased area to date. This illustrates significant room for geographic growth through further lease auctions

**Risk:**Future auctions could see more competition if lease areas are limited

**Impact on CPP Investments/Reventus Power:** Acquiring lease rights enables expanding project pipeline

# Key Policy and Regulatory Issue: Environmental and Land Use Regulations

California has stringent environmental and land use laws governing wind project approvals. These include CEQA, Endangered Species Act, Coastal Zone Management Act.

## Key Data Points:

- Regulatory Landscape: Wind energy projects in California are governed by several acts, floating offshore wind farms present unique marine wildlife impact concerns
- Project Challenges: 25% of proposed CA wind projects since 2015 faced environmental challenges

## Opportunities:

- Proactively addressing environmental risks can speed project approvals

## Risks:

- Lawsuits under CEQA, ESA, CZMA can delay permits and construction
- Unanticipated mitigation needs could increase compliance costs

**Impact on CPP Investments/Reventus Power:** Delays can lead to a cost overrun by 10-15%, impacting the overall profitability.

# Key Policy and Regulatory Issue: Grid Integration and Transmission Constraints

California is facing challenges integrating growing renewable generation due to transmission limitations. Upgrades needed to interconnect resources and avoid curtailment losses.

## Key Data Points:

- CAISO: ~15 GW new transmission required to meet 60% RPS by 2030
- Pathways Project aims to add 2,000-3,000 MW capacity along Central Coast by 2028-2030
- CAISO projects 5% curtailment losses of wind/solar without upgrades by 2030

**Opportunity:** Infrastructure enhancements can lead to increased grid capacity and storage, offering expanded scope.

**Impact on CPP Investments/Reventus Power:** Potential to tap into larger market share, leveraging infrastructural advancements.

**Risk:** Delays in the development of new transmission infrastructure could limit the ability of to deliver electricity to market,

**Impact on CPP Investments/Reventus Power:** CAISO projects 5% curtailment losses of wind/solar generation by 2030 without transmission upgrades. For a 2GW project generating ~7 million MWh annually, this equates to ~350,000 MWh in potential curtailment losses per year. At \$50/MWh wholesale electricity prices, that's \$17.5 million in annual revenue at risk from congestion

# Outreach - Stakeholders Identification

## 1. **Regulatory Authorities:**

- CA Energy Commission (CEC): Gain insights into policy directions and long-term energy goals.
- CA Public Utilities Commission (CPUC): Understand transmission planning, infrastructure upgrades, and future regulatory landscape.

2. **Environmental Advocacy Organizations:** To ascertain environmental concerns and collaboration opportunities for sustainable development like Sierra Club & Audubon California

3. **Energy Industry Counterparts:** Engage with other key renewable energy stakeholders in California for insights, challenges, and collaborative initiatives.

## 4. **Policy and Planning Organizations:**

- California Independent System Operator (CAISO): Discuss challenges & strategies on integrating renewable generation.
- American Wind Energy Association: Gauge lobbying initiatives around potential federal tax credit extensions.

5. **Legislative Representatives like California Congressional Members:** Understand positions on critical policies like the Production Tax Credit (PTC) extension and its implications.

# Outreach - Key Questions

## **For State Regulators and Agencies:**

- How will implementation of the state's RPS impact demand for wind energy over the next 5-10 years?
- What transmission projects are planned to support offshore wind growth under the RPS?
- What are the main challenges you foresee in integrating increasing amounts of offshore wind onto the grid?
- What is the anticipated timeline and key steps for permitting the Morro Bay offshore wind lease area?

## **For Environmental Groups:**

- Can you cite successful wind developer partnerships that led to sustainable outcomes? Are there specific species or habitats posing significant wind development concerns?

## **For Industry Peers:**

- Which policy challenges have you encountered and how did you navigate them? What successful strategies have you implemented to address grid integration issues?

## **For Legislative Representatives, Policy and Planning Organizations:**

- Are there upcoming legislative changes that could impact the wind energy sector?
- Are there specific policies or incentives being considered to boost wind energy adoption?

# References

- California Energy Commission. (2023, March 1). California Energy Almanac.  
<https://www.energy.ca.gov/data-reports/energy-almanac>
- <https://www.cppinvestments.com/public-media/headlines/2022/golden-state-wind-a-joint-venture-of-ocean-winds-and-cpp-investments-wins-2-gw-california-wind-energy-lease/>
- BOEM Offshore Wind Leasing Information. <https://www.boem.gov/renewable-energy/leasing-and-plans>
- <https://www.boem.gov/renewable-energy/state-activities/california>
- <https://www.boem.gov/newsroom/press-releases/boem-designates-four-wind-energy-areas-gulf-mexico>
- Offshore Wind Market Report 2021, DOE.  
[https://www.energy.gov/sites/default/files/2021-08/Offshore%20Wind%20Market%20Report%202021%20Edition\\_Final.pdf](https://www.energy.gov/sites/default/files/2021-08/Offshore%20Wind%20Market%20Report%202021%20Edition_Final.pdf)
- Congressional Budget Office. (2023, February 28). The Economic Impacts of the Production Tax Credit for Wind Energy. Retrieved from <https://windexchange.energy.gov/projects/tax-credits>
- <https://www.energy.ca.gov/data-reports/energy-almanac/california-electricity-data/2021-total-system-electric-generation>