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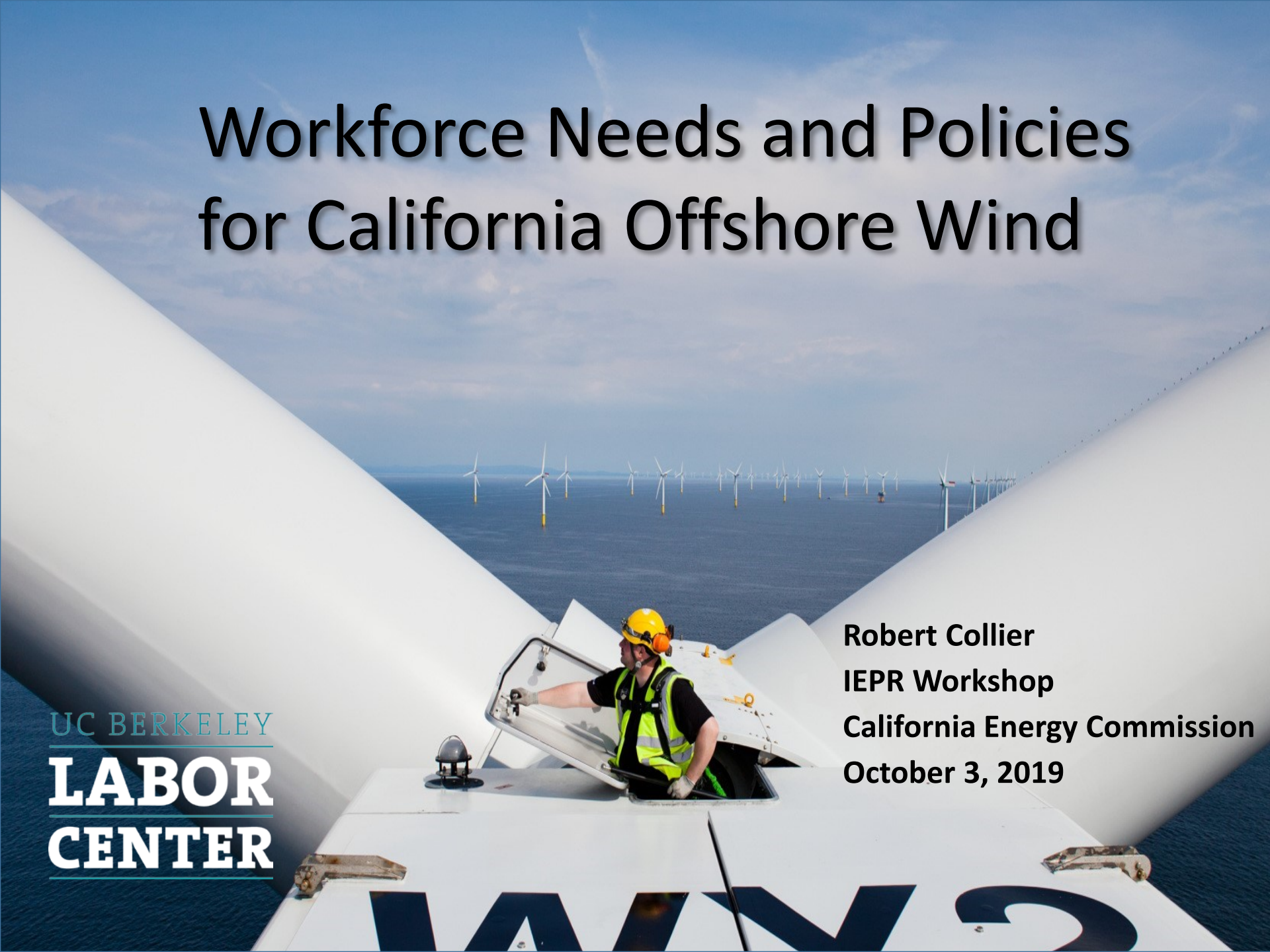
Workforce Needs and Policies for California Offshore Wind



Robert Collier

UC BERKELEY LABOR CENTER

IEPR Workshop

California Energy Commission

October 3, 2019

New report, co-authored with E3

- California Offshore Wind: Workforce Impacts and Grid Integration,http://laborcenter.berkeley.edu/offshore-wind-workforce-grid/

How many jobs: Prior research

- Published economic impact projections: a build-out of 18 GW by 2045 would create as many as 13,620 direct annual jobs in manufacturing, construction, and installation, along with a maximum of 4,330 permanent jobs in operations and maintenance.
- But these numbers could vary wildly. More important – focus on the variables, i.e. impacts of alternative policies.

Lessons from Abroad

- **Britain** – Despite being world's #1, has not translated into the creation of a large domestic supply chain.
- **Germany** – Bremerhaven shows government support for port development can play a key role in creating an industrial cluster, but success is not guaranteed to be long lasting.
- **Denmark** - sustained government direction and control over many years can steer the success of the offshore wind sector and create a highly competitive industrial cluster.
- **China** – industry is rising exponentially. In coming years, it may be strong competitor in the California offshore turbine market.
- **Overall** - The offshore wind industry is global by nature, and international competition must be taken into account in policymaking.

The U.S. Experience: What States Can Do

- The regulatory agencies of East Coast states have greater legal authority than those in California to directly impose labor standards and local content requirements on offshore wind developers.
- Prevailing Wage and/or Project Labor Agreements: New York, New Jersey, Connecticut, Maryland
- Local content requirements: New York, Maryland, New Jersey
- Ports development: all.

CA climate policy: existing best practices

- **Community Workforce Agreements and Community Benefits Agreements.** CWAs are PLAs with goals for hiring from local communities and/or disadvantaged groups, while CBAs are agreements between community groups and a developer and require benefits similar to CWAs.
- **Responsible procurement policies**. Examples: a floor on wages, skill standards, and other workforce standards in bidding evaluation for contracts for large capital equipment and public services and in grant programs.
- **Skill standards because of worker safety risks**. Example: SB 54 (2012) mandates a "skilled and trained workforce" in private sector construction or maintenance work in refineries.
- **Training partnerships**. The state Workforce Board's new initiative for a High-Road Training Partnership (HRTP) program could be adapted for offshore wind – to add modules to existing apprenticeship programs, and other employer-led training initiatives.
- **Just Transition.** Example: LADWP could transition workers at municipal gas-fired utility power plants into new offshore wind projects.

Forthcoming report to Legislature: workforce policy options for California climate policy

- Pursuant to a line item in AB 398 (2017), the California Workforce Development Board contracted with UC Berkeley Labor Center to write a report to the Legislature analyzing workforce impacts of state climate policies and examining high-road policy options.
- “Putting California on the High Road: A Jobs and Climate Action Plan For 2030,” Carol Zabin et al, UC Berkeley Labor Center, forthcoming in fall 2019.

Gordian Knot: Ports and Supply Chain

- California lacks an existing supply chain for major wind components. It also lacks suitable port and manufacturing locations.
- Manufacturers would be more likely to build a California supply chain if the state and federal governments set a firm target at least 8 GW in offshore capacity per decade.
- The state should work with industry to identify and develop a multi-site network of ports, including Humboldt Bay.
- The state would need to address the North Coast's lack of transmission interconnection to the state grid.

Could the Port of Humboldt Bay…

… be turned into this?

Floating platforms: differing workforce needs

Platform	Materials	Job Skills & Trades	Local Content & Jobs	Likely Locations	Dry dock Needed	Dock Acreage
Ideol	Concrete	All building trades for platform assembly	High	California	No	Medium
Principle Power	Steel	All building trades for ports	Very low at start except high port construction; possibly high in later manufacturing	East Asia	Yes	Large
Aqua Ventus	Concrete	All building trades?	Unclear, possibly high	California	No	Medium
Stiesdal	Steel	Minor	Low	Other U.S.	No	Small

Conclusion: “Go big or go home”

- Offshore wind could provide thousands of high-wage jobs – but only if the state commits to fixed procurement targets, support for transmission and port upgrades, and a high-road workforce approach.
- If the state and federal planning process evolves in a more piecemeal basis, the likely result would be imported inputs and insignificant economic benefits.

Full report:

http://laborcenter.berkeley.edu/offshore-wind-workforce-grid/

Robert Collier

robert.collier@berkeley.edu

rgcollier@gmail.com

(415) 298-5726