Cascade Policy Institute
OREGON

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Joint Committee on Carbon Reduction
Oregon State Legislature
2019 Regular Session

Re: HB 2020—The BEAR Report's analysis of the economic impacts of cap-and-trade on the Oregon economy cannot be relied upon

Dear Co-Chairs Dembrow and Power, Vice Chairs Bentz and Smith,
and members of the committee:

As the legislature is considering HB 2020 relating to a statewide cap-and-trade program, the Oregon Carbon Policy Office has distributed a report by Berkeley Economic Advising and Research (BEAR). Previous economic evaluations by others have small, but mixed, economic effects of cap-and-trade in Oregon. All of these reports are overly optimistic given the large-scale intrusion and interruption cap-and-trade would impose on most sectors of the state's economy. The BEAR Report takes such optimism to an extreme, developing unrealistic and unreliable forecasts and presenting misleading and fallacious information to support its conclusions, as described below.

BEAR's unrealistic forecast of Oregon output is unreliable.

- The BEAR Report Table 4.2 projects Oregon's 2030 baseline gross state product (GSP) will be $366 billion, in 2016 dollars. The U.S. Bureau of Economic Analysis calculates that Oregon's GSP in 2016 was $215 billion.
- Based on these figures, BEAR forecasts Oregon's economy will grow by an average of 3.9 percent a year. However, the BEAR Report (p. 7) notes that Oregon's GSP has grown by approximately 2.7 percent a year over the past

20 years. The BEAR Report provides no explanation for a baseline growth rate that is 40 percent higher than has been experienced over recent decades.

- Thus, BEAR's forecast of the Oregon economy is unrealistic and cannot be relied upon to draw any conclusion regarding the impact of HB 2020 on future economic output.

BEAR's unrealistic forecast of Oregon employment is unreliable.

- The BEAR Report Table 4.2 projects Oregon's 2030 baseline employment will be 3.36 million full-time equivalents (FTE). Because a part-time jobs is less than one FTE, the BEAR Report's FTE forecast amounts to more than 3.5 million full- and part-time jobs.
- In contrast, the Oregon Office of Economic Analysis forecast indicates that 2030 full- and part-time employment would be approximately 2.12 million.
- Based on these figures, BEAR forecasts Oregon employment will grow by an average of 3.3 percent a year. However, the Office of Economic Analysis reports Oregon's employment growth averaged only 1.0 percent a year over the past 20 years. The BEAR Report provides no explanation for its conclusion that baseline employment growth rate would be more than triple the rate the state has experienced over recent decades.
- Thus, BEAR's forecast of Oregon employment is unrealistic and cannot be relied upon to draw any conclusion regarding the impact of HB 2020 on future employment.

BEAR's fallaciously concludes that jobs are created by replacing high productivity jobs with low productivity jobs.

- The BEAR Report's Figure 4.13 and supporting text indicate that energy efficiency "creates" jobs by "diverting" resources from jobs such as natural gas distribution ($836,000 of output per employee) to services (less than $576,000 of output per employee).
- In other words, BEAR implicitly suggests that jobs are "created" by reducing labor productivity. This is at odds with widely accepted economic theory and evidence that increased employment and incomes are associated with *increased* labor productivity.

- This is also at odds with the BEAR Report Table 4.2, which implies that output per employer is higher, rather than lower, under a cap-and-trade program. This internal inconsistency calls into question the BEAR Report's conclusions regarding output and employment.

The BEAR Report's Figure 4.13 is deceptive in its presentation.

- The figure indicates that information is from the U.S. Bureau of Labor Statistics regarding the relationship between employment and output for Oregon industries. It is my understanding that BLS does not produce such information at the state level, thus the information presented in the figure does not apply directly to Oregon.
- Even worse, BEAR manipulates the presentation of the data. A close look at the figure reveals that the *X*-axis and the *Y*-axis are identical: each axis displays jobs per $1,000 of output.
    - As shown in Panel A of the figure on the following page, an accurate display of the information is a meaningless upward sloping 45-degree line (meaningless because, by definition $X = Y$).
    - Panel B shows BEAR reverses the order of the *X*-axis to produce a downward sloping line, which gives the impression of a demand curve.
    - Panel C shows that BEAR converts the *Y*-axis to logarithmic scale to provide curvature to the line.
    - Panel D is the figure presented in the BEAR Report.

I understand many legislators feel a sense of urgency in passing a cap-and-trade bill this session. This urgency must be tempered by a clear recognition that cap-and-trade will present a large-scale intrusion and interruption on most sectors of the state's economy. The BEAR Report provides unrealistic and unreliable forecasts that should not be relied up in considering this expansive legislation.

Respectfully submitted by,

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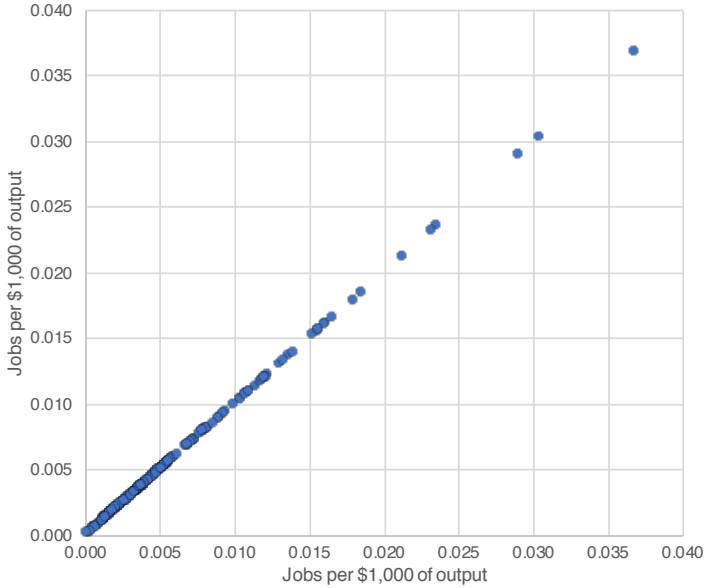
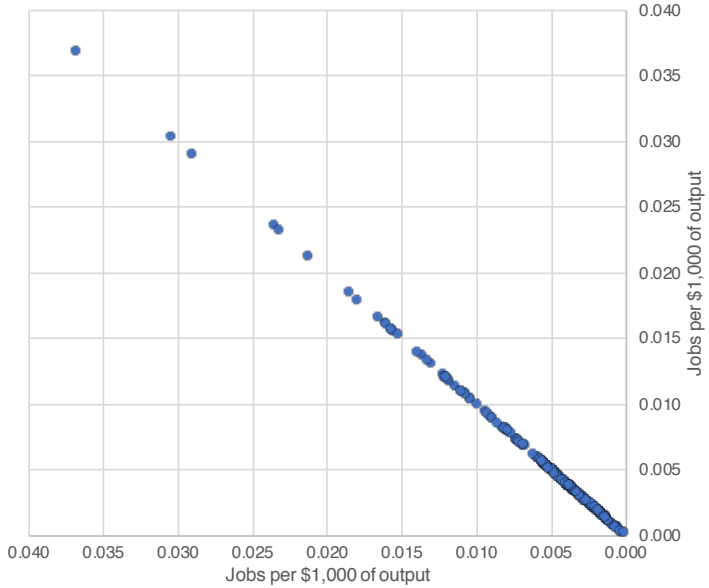
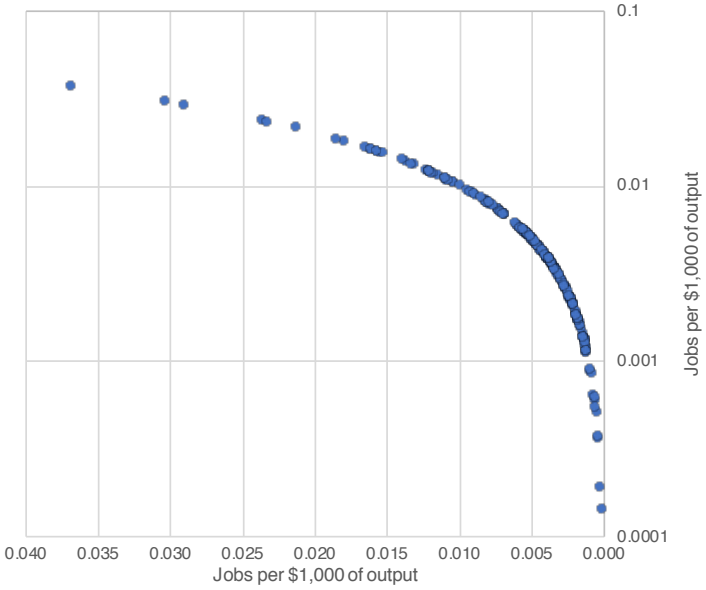
Panel A: U.S. Bureau of Labor Statistics data



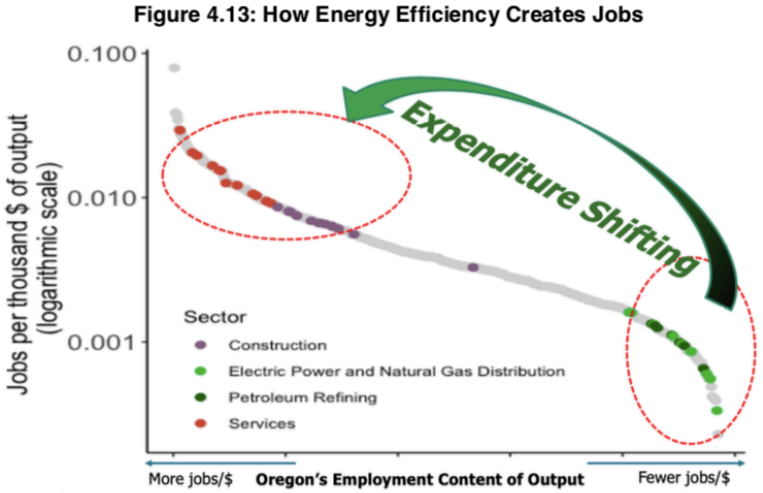
Panel B: BEAR reverses the order of the X-axis, to give impression of a trade-off



Panel C: BEAR converts Y-axis to logarithmic scale (base 10)



Panel D: Figure presented in BEAR Report



Source: US Bureau of Labor Statistics.