

## How much would the HCA cost Oregonians?

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**How much would the HCA cost Oregonians?** This question was asked by Oregon Senator Olsen in a 1/14/16 legislative hearing.. The question is important although it has more than one answer depending on how "cost" is computed. "Cost" is often defined differently, such as: initial cost, net cost, and cost-benefit. When risk factors are accounted, there may also be a cost of failure to act.

1. **Sixty-two dollars per Oregon resident yearly is one reasonable estimate of simple out-of-pocket"cost," if measured at year three of implementation.** However, This \$62 annual per Oregon capita is based on another state using the same program, extrapolating for population difference. Using this approach **we estimate that the gross cost at the third year of full implementation would total around \$250 million or \$62 per Oregon resident.** This figure is based on the [proposed implementation method](#) of the policy, using a current WCI allocation price of \$13/ton of CO<sub>2</sub>e, 53% of allocations being given away for program, fairness and economic stability purposes, based on Oregon's current 64 million metric tons of CO<sub>2</sub>e emissions.

2. **We expect at least a 3:1 return on the "cost". By the third year, we can estimate more than \$186 per \$62 cost.** The HCA up-front cost is really a fee paid by entities which emit more than 25,000 tons CO<sub>2</sub>e per year (comprising less than 100 Oregon companies) for the privilege of polluting our common air-shed . The pollution fee is rebated to Oregon residents and businesses in the form of targeted investments to reduce negative pollutant impacts. The rebate includes low-income support to offset price increases that the emitters would pass through to the public, as well as investments in renewable energy, conservation, adaptation measures, and research. These targeted investments yield returns, which more than offset the costs incurred. Analysis of evidence finds a [net-positive economic benefit ranging from 3:1 to 50:1](#)<sup>1</sup> above the initial cost. Partly this is because our consumption of CO<sub>2</sub> emitting products (e.g. fossil fuels) are almost exclusively purchased from outside Oregon, while the investments will be made inside Oregon, yielding a positive benefit.

3. **Not addressing climate change has a bigger cost to Oregon's economy.** "Based on a leading aggregate damage estimate in the climate economics literature, a delay that results in warming of 3° Celsius above preindustrial levels, instead of 2°, could increase economic damages by approximately 0.9 percent of global output. To put this percentage in perspective, 0.9 percent of estimated 2014 U.S. national Gross Domestic Product (GDP) is approximately \$150 billion nationally per year. The incremental cost of an additional degree of warming beyond 3° Celsius would be even greater. Moreover, "these costs are not one-time, but are rather incurred year after year because of the permanent damage caused by increased climate change resulting from the delay."<sup>2</sup> Proportionally, not taking action will cost Oregon over \$1 billion per year. This may be understating it.

The Pentagon released a study in 2014 stating climate change is placing immediate costs on US defenses and threats to low elevation installations, potentially running into hundreds of billions of dollars.<sup>3</sup> Worldwide, populations in low-lying areas are facing displacement of hundreds of millions of people, a catastrophe of unheard-of dimension. There are other costs of inaction.

Conclusion: Addressing climate change smartly will yield a strong net positive benefit immediately. Applying a conservative net benefit ratio, near term benefit could exceed \$1 billion per year. Not taking action has a future cost to Oregon of over \$ 1 billion per year, expressed in current value of money. Delaying action cancels benefits and increases long-term costs. Faster action has far stronger benefits.<sup>4</sup> **The spread between our collective action or non-action in addressing climate change translates to at least two billion dollars per year to Oregonians.**

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<sup>1</sup> <http://www.policyinteractive.org/OreStudiesCalAB32JobsEconomyFinal.pdf>

<sup>2</sup> [https://www.whitehouse.gov/sites/default/files/docs/the\\_cost\\_of\\_delaying\\_action\\_to\\_stem\\_climate\\_change.pdf](https://www.whitehouse.gov/sites/default/files/docs/the_cost_of_delaying_action_to_stem_climate_change.pdf) (p.2)

<sup>3</sup> <http://registerguard.com/rg/news/32285528-76/climate-change-will-challenge-u.s.-military-defense-secretary-says.csp>

<sup>4</sup> [https://www.whitehouse.gov/sites/default/files/docs/the\\_cost\\_of\\_delaying\\_action\\_to\\_stem\\_climate\\_change.pdf](https://www.whitehouse.gov/sites/default/files/docs/the_cost_of_delaying_action_to_stem_climate_change.pdf) (pp5-7)