CARBON POLLUTION ACCOUNTABILITY ACT: REVENUE FORECAST

Governor Jay Inslee's proposal to establish a market-based program to reduce greenhouse gas (GHG) emissions will enable the state to meet the emissions limit the Legislature put in place in 2008. In addition to reducing carbon pollution, the program will diversify the state's job base and strengthen our economy as well as improve the health of Washingtonians.

The Carbon Pollution Accountability Act — which will require the entities responsible for most of the state's carbon pollution to pay for their emissions — will also create a reliable and robust new revenue source for the state. In its current form (Substitute House Bill 1314), the program will generate nearly $1.3 billion in FY 2017, growing steadily to $2.2 billion by FY 2026.

Starting July 1, 2016, the act will set an annual limit on the total amount of carbon pollution that major emitters can release into the air — those whose annual emissions exceed 25,000 metric tons of carbon dioxide equivalent (MMTCO_2e). If these entities are not able to cut their emissions below that threshold, they must purchase "allowances" from the state for every ton of pollution they emit. The state's annual total emissions limit and the number of available allowances will shrink over time, thereby ensuring a gradual reduction in carbon emissions.

HOW WE ARRIVED AT OUR REVENUE ESTIMATE

The state has reliable data sources it can use to estimate annual GHG emissions. Based on those data, we estimate that the total annual emissions for Washington in 2016 will be 98 MMTCO_2e. (Fuels refined in Washington but exported out of state and covered by the program total 27.4 additional MMTCO_2e.)

The bill exempts a number of sectors, including aviation fuel, waste management, agriculture, tribes and military in addition to emissions exempted under state law. These sectors account for 22 percent of the state's GHG emissions.

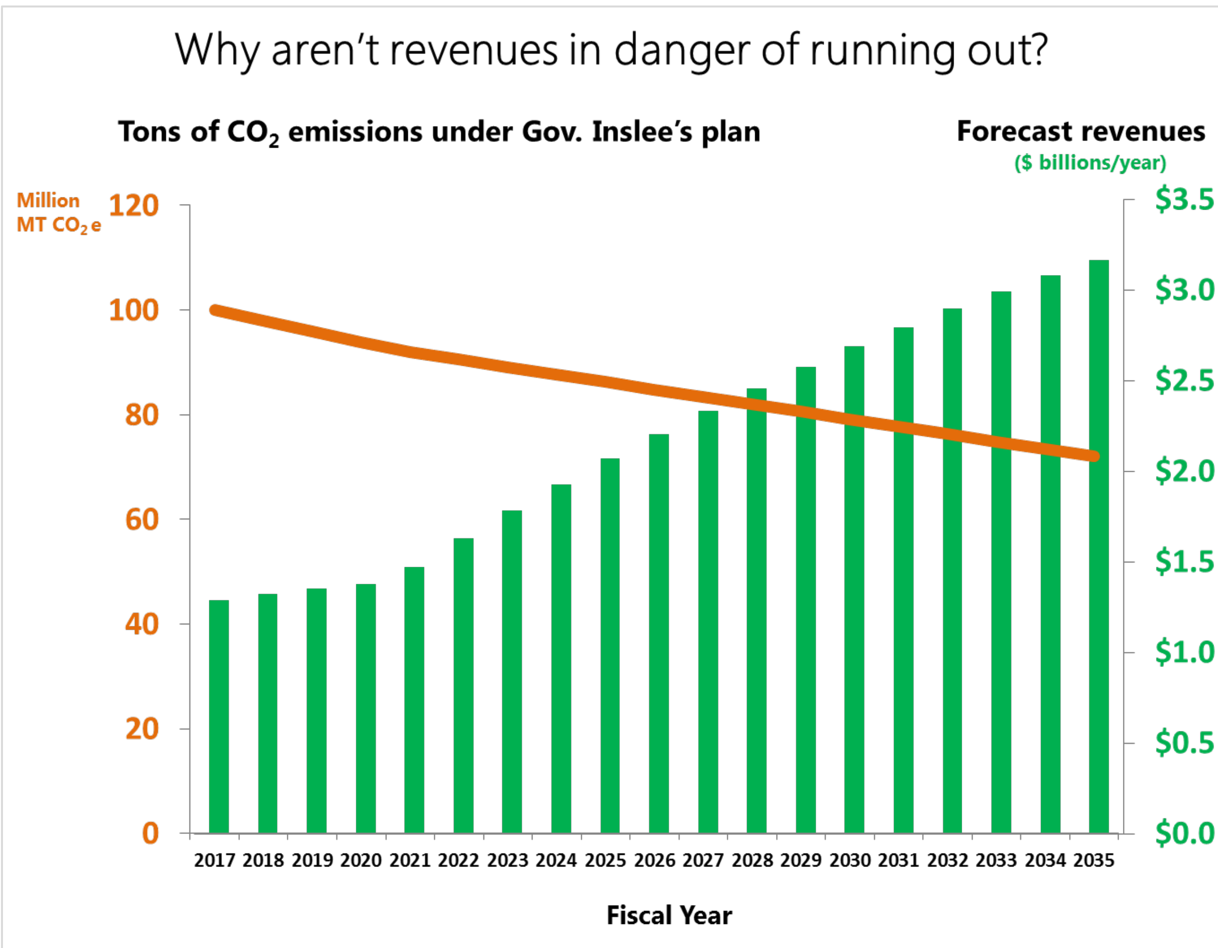
Emissions from the remaining sectors — and those covered fuels exported out of state— determine the number of allowances to be auctioned and provide the basis for the state's revenue forecast. To help reach statutory limits, total emissions from the covered entities would be reduced by 1.5 percent per year until 2020 and then by 1.8 percent per year from 2021 to 2035. The declining availability of allowances ensures that the covered entities' share of statewide emissions declines proportionately over time.

For the purposes of calculating how much revenue the program will generate, we assumed a minimum allowance price ("floor price") of $12.90 per ton for FY 2017. The floor price would increase by 60 cents per ton through 2020, then increase by $2 per ton beginning in 2021. These prices are consistent with those used in other carbon markets with similar design.

WHY DOES REVENUE CONTINUE TO GROW EVEN THOUGH EMISSIONS ARE REDUCED?

The main reason revenue will continue to grow lies in the program's design. The allowance floor price — the minimum amount polluters must pay per ton of carbon emitted — will rise faster than the rate at which we reduce our emissions. So even as emissions are reduced, the higher price that major emitters pay for their emissions will drive up total revenues.

SHB 1314 calls for proceeds from the program to be reinvested in the community: approximately 40 percent to education, 30 percent to clean transportation, 15 percent to support affected low-income communities as well as trade and energy-intensive industries, and 15 percent to clean energy and other programs.



Estimate of Receipts from Allowance Auctions

Calendar Year	$/MT CO_2e	Million Metric Ton (MT) CO_2e	Revenue ($/year)	Conversion to Fiscal Year Data			
				Fiscal Year	$/MT CO_2e	Million MT CO_2e	Revenue ($/year)
CY 2016[1]	12.60	50.6	637,459,270				
CY 2017	13.20	99.1	1,307,686,115	FY 2017	12.90	100.1	1,291,619,860
CY 2018	13.80	97.0	1,337,913,432	FY 2018	13.50	98.0	1,323,117,306
CY 2019	14.40	94.8	1,365,600,491	FY 2019	14.10	95.9	1,352,074,493
CY 2020	15.00	92.7	1,390,747,292	FY 2020	14.70	93.8	1,378,491,424
CY 2021	17.00	91.3	1,551,861,817	FY 2021	16.00	92.0	1,472,019,803
CY 2022	19.00	89.9	1,707,254,354	FY 2022	18.00	90.6	1,630,273,334
CY 2023	21.00	88.4	1,856,924,903	FY 2023	20.00	89.1	1,782,804,877
CY 2024	23.00	87.0	2,000,873,465	FY 2024	22.00	87.7	1,929,614,433
CY 2025	25.00	85.6	2,139,100,039	FY 2025	24.00	86.3	2,070,702,001
CY 2026	27.00	84.1	2,271,604,625	FY 2026	26.00	84.8	2,206,067,581
CY 2027	29.00	82.7	2,398,387,224	FY 2027	28.00	83.4	2,335,711,173
CY 2028	31.00	81.3	2,519,447,835	FY 2028	30.00	82.0	2,459,632,778
CY 2029	33.00	79.8	2,634,786,458	FY 2029	32.00	80.6	2,577,832,395
CY 2030	35.00	78.4	2,744,403,094	FY 2030	34.00	79.1	2,690,310,024
CY 2031	37.00	77.0	2,848,297,742	FY 2031	36.00	77.7	2,797,065,666
CY 2032	39.00	75.6	2,946,470,402	FY 2032	38.00	76.3	2,898,099,320
CY 2033	41.00	74.1	3,038,921,074	FY 2033	40.00	74.8	2,993,410,987
CY 2034	43.00	72.7	3,125,649,759	FY 2034	42.00	73.4	3,083,000,665
CY 2035	45.00	71.3	3,206,656,456	FY 2035	44.00	72.0	3,166,868,356

[1] Note that the program would not start until July 1, 2016, so the assumed revenues would be derived only from half of the total emissions for 2016 as estimated from the annual state inventory and as described earlier.