Climate Commitment Act Clean Fuel Standard

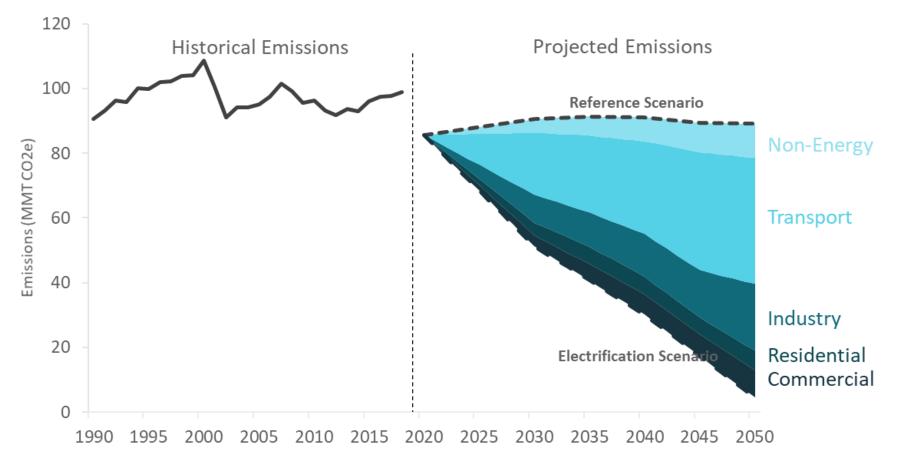
October 7, 2021

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Washington's Emission's Pathway

Washington Historical and Projected Gross Emissions



Climate Commitment Act

- Establishes a declining cap on about 75% of Washington's emissions.
- Relevant covered entities (RCW 70A.65.080):
 - (1)(a) Where the person owns or operates a facility and the facility's emissions equal or exceed 25,000 metric tons of carbon dioxide equivalent;
 - (2) A person is a covered entity as of the beginning of the second compliance period...where the person owns or operates a waste to energy facility utilized by a county and city solid waste management program and the facility's emissions equal or exceed 25,000 metric tons of carbon dioxide equivalent.
 - (3)(a) A person is a covered entity beginning January 1, 2031...where the person owns or operates a:

(i) Landfill utilized by a county and city solid waste management program and the facility's emissions equal or exceed 25,000 metric tons of carbon dioxide equivalent;

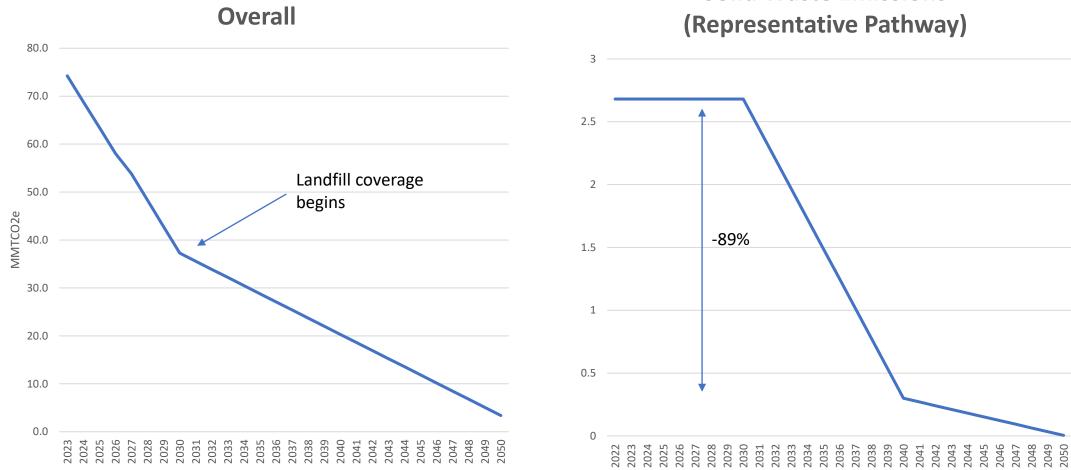
(b) Subsection (a) of this subsection does not apply to owners or operators of landfills that:

(i) Capture at least 75 percent of the landfill gas generated by the decomposition of waste using methods under 40 C.F.R. Part 98, Subpart HH - Municipal Solid Waste landfills, and subsequent updates; and

(ii) Operate a program, individually or through partnership with another entity, that results in the production of renewable natural gas or electricity from landfill gas generated by the facility.

(c) It is the intent of the legislature to adopt a greenhouse gas reduction policy specific to landfills. If such a policy is not enacted by January 1, 2030, the requirements of this subsection (3) take full effect.

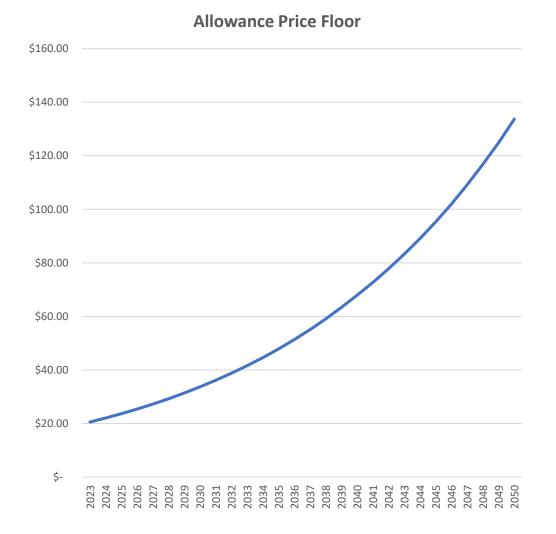
Approximate CCA Trajectory



Solid Waste Emissions (Representative Pathway)

Climate Commitment Act - Revenue

- In order to emit a ton of carbon, a covered entity must retire a compliance instrument—an allowance, an offset, or a price ceiling unit.
- Allowances may be purchased from:
 - Quarterly auctions; or
 - Other entities that have previously acquired allowances and no longer need them.
- CCA provides for a price floor at auction, which will set the economywide price for auctions. Auctions may exceed price floors.



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 - Other entities that have previously acquired allowances and no longer need them.
- CCA provides for a price floor at auction, which will set the economywide price for auctions. Auctions may exceed price floors.
 - California allowance prices have generally traded about 6% above the floor
 - The last California auction went for over 30% over floor

Biennium	Total Revenue (millions of \$)	Climate Commitment Account (millions of \$)
2021-2023	\$220-\$290	\$55-\$103
2023-2025	\$888-\$1,168	\$109-\$306
2025-2027	\$915-\$1,203	\$127-\$349

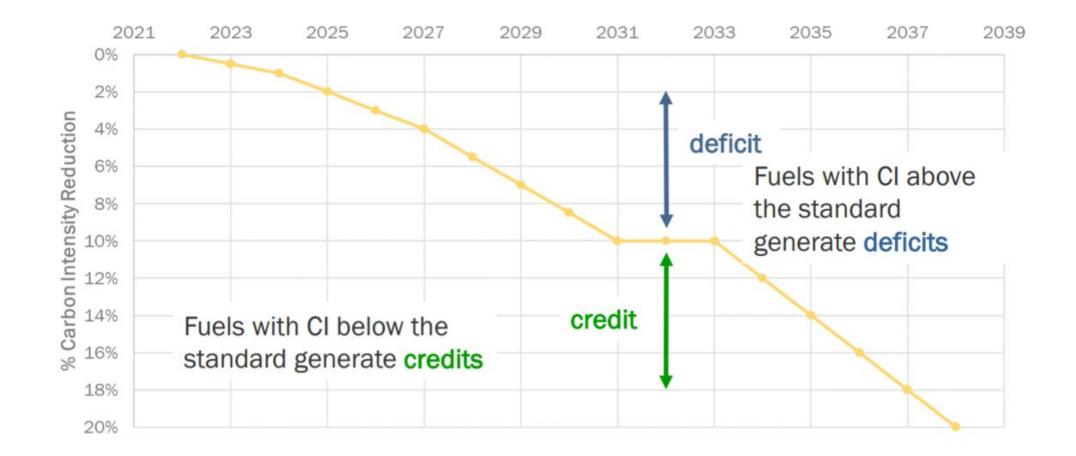
Climate Commitment Account -Revenue

An enormous list of eligible spending categories, including:

- Clean energy
- Building electrification
- Worker transition investments
- Working Families Tax Rebate
- Agricultural carbon reductions
- "Programs, activities, or projects that reduce emissions from landfills and waste-to-energy facilities through diversion of organic materials, methane capture or conversion strategies, or other means"

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Clean Fuels Standard



For example... Regulated entity

- In 2025, the Clean Fuels Program requires an average carbon intensity of 95 gCO2/MJ.
- A petroleum refinery:
 - Produces 100,000 MJ worth of gasoline at an intensity of 100 gCO2/MJ.
 - This produces a deficit 500,000 gCO2.
 - It must acquire an equivalent number of credits.



For example...Regulated entity

- It can:
 - Improve efficiency of its operation to reduce emissions by 500,000 gCO2.
 - Blend ~10,000 MJ of a biofuel with a score of 45 gCO2/MJ.
 - Purchase credits from producers of clean fuels equivalent to 500,000 gCO2.
- Why is this good?
 - Reduced emissions. Pollution reduction that benefits climate *and* local air quality.
 - Created demand for a low carbon biofuel.
 - Created a new revenue stream for a low carbon fuel producer.





For example...Credit generator

For the last week, the average LCFS credit price in California was \$180.02/metric ton

LCFS Weekly Snapshot	27 th September 2021 - 3 rd October 2021	
Transfer Type	All Non Zero	Туре 1
Average Price [3] (\$/MT)	\$180.02	\$171.50
Price Range (\$/MT)	\$154.50 - \$198.00	\$154.50 - \$196.00
Total Volume (MT)	620,146	290,704
Total Value (\$)	\$111,641,490	\$49,857,092

	\$/GGE
Cedar Hills Landfill	\$1.23
Landfill Gas Average	\$0.96
Food Waste, Used Cooking Oil, Etc	\$1.61
Urban Landscaping Waste	\$2.00



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Questions?