

2021 Session Debrief

A Clean Transportation Perspective for
Fleets

Michael Breish

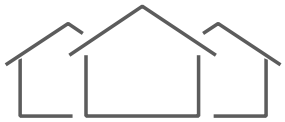
SENIOR ENERGY POLICY SPECIALIST

05/21/2021



Washington State
Department of
Commerce

We strengthen communities



**HOUSING
HOMELESSNESS**



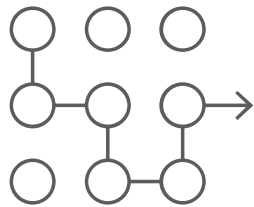
INFRASTRUCTURE



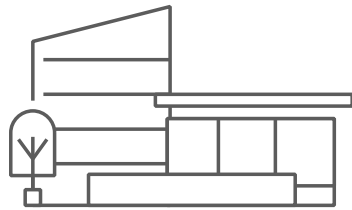
**BUSINESS
ASSISTANCE**



ENERGY



PLANNING



COMMUNITY FACILITIES



**CRIME VICTIMS &
PUBLIC SAFETY**



**COMMUNITY
SERVICES**

Big Money, Big Policy

A summary



Clean Transportation Policies and Budgets

Bills

- HB 1091: Clean Fuel Standard
- HB 1287: ZEV Planning
- HB 1502: County electric ferries
- HB 1514: Commute Trip
- SB 5000: FCEV incentive
- SB 5026: Port electrification/no automation
- SB 5126: Cap & Invest
- SB 5141: EJ Implementation
- SB 5192: EVSE regulations

Budgets

- Transportation: ferries, transit, program K (AKA Buell Fuel)
- Capital: CEF, Ecology
- Operating: Staffing, community engagement, 1099

AFV-TAG/Fleet focus

- HB 1091: Clean Fuel Standard
- HB 1287: ZEV Planning
- SB 5141: EJ Implementation
- SB 5126: Cap & Invest
- SB 5192: EVSE Regulations
- Budgets

HB 1091: Clean Fuel Standard

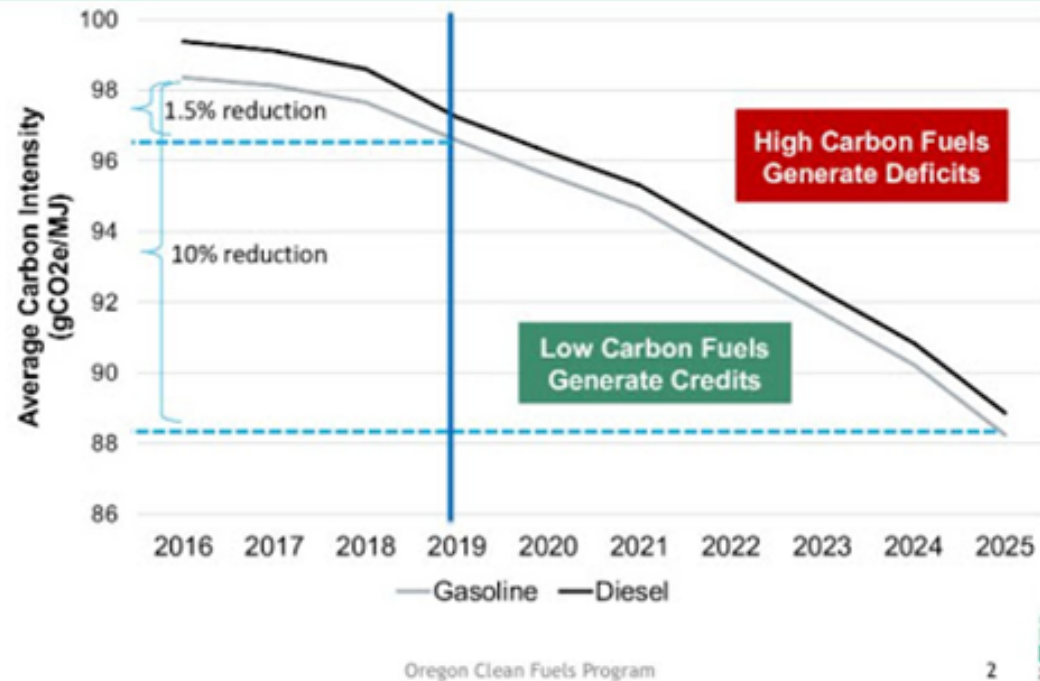
HB 1091 (Clean Fuel Standard): A summary

Basics

- Implementing Agency: Ecology
- Summary: Requires 20% reduction carbon intensity in transportation fuels from 2017 levels by 2038. Market-based mechanism where credits and deficits are generated, traded, banked and retired.
- Who's impacted: Fossil fuel supply chain, public/private fleet owners, biofuel industry, utilities
- Effective date: No later than January 1, 2023

HB 1091 (Clean Fuel Standard)

Clean Fuel Standards

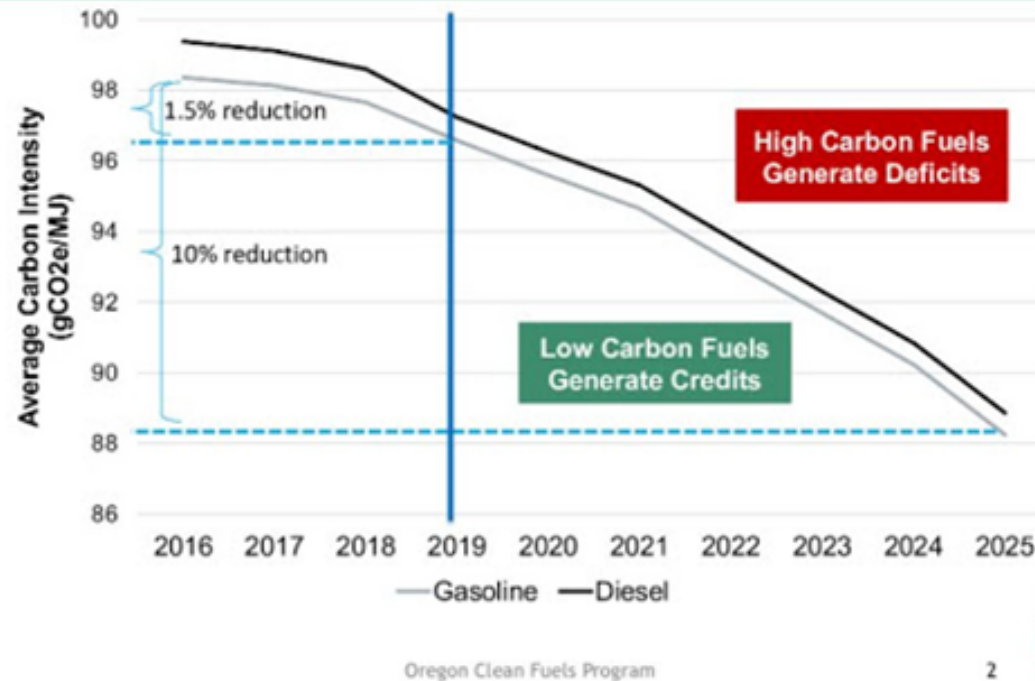


Mechanism

- Carbon intensity (grams CO₂-equivalent/megajoule energy) set based on 2017 baseline levels
- CI increments:
 - 0.5% 2023-2024 (1%)
 - 1% 2025-2027 (4%)
 - 1.5% 2028-2031 (10%)
 - No change in 2032 and 2033

HB 1091 (Clean Fuel Standard)

Clean Fuel Standards



Example CI from Oregon

- Biodiesel: 32.8 (BIOX Canada)
- CNG: 46.61 (Pinnacle Gas)
- Ethanol: 60.55 (Dakota Ethanol)
- Electricity: 4.74 (Salem mix)
- Diesel: 100.74 (avg. weight)
- E10 gasoline: 98.06 (Midwest avg.)
- Renewable diesel: 14.78 (Fulcrum Sierra)

HB 1091 (Clean Fuel Standard)

Credit Generation Opportunities

- Fuels with a CI below the standard
- Projects including:
 - CC&S
 - Investments in equipment used to produce fuels from nonfossil feedstocks
 - ZEV fueling by commercial, nonprofit, and public entities
 - “smart” vehicle charging (related to lower GHG emitting electricity)
 - DCFC and H2 refueling infrastructure

HB 1091 (Clean Fuel Standard)

Permanent Exemptions

- Exported transportation fuel
- Aircraft, vessels, or railroad locomotives propulsion fuel
- Military tactical vehicles and tactical support equipment fuel
- Transportation fuels below certain thresholds
- Other fuels determined by Ecology to align with other similar programs or standards

Temporary Exemptions:

- Through January 1, 2028; fuels can elect to generate credits
- Special fuel used in off-road vehicles to transport logs
- Dyed special fuel used in vehicles primarily for construction work and not designed to transport persons or property
- Dyed special fuel used for agricultural purposes that are exempt from state fuel taxation

HB 1091 (Clean Fuel Standard)

The role of and opportunities for utilities

- **“Restricted” 50%**
 - Must be spent on “transportation electrification projects”
 - 60% of the “restricted” bucket must benefit disproportionately impacted communities (i.e., non-attainment area (actual or at risk) or identified by DOH)
- **“Flexible” 50%**
 - Used for activities and projects jointly determined by Ecology and WSDOT that have the “highest impact on reducing GHG emissions and decarbonizing the transportation sector”
- **Participating utilities must provide annual reporting to Ecology**

HB 1091 (Clean Fuel Standard)

Stuck at 10%

- **Beginning 1/1/28, CI reduction target cannot increase beyond 10% until:**
 - At least a 15% net increase in the volume of in-state liquid biofuel production and the use of feedstocks grown or produced within the state relative to the start of the CFP; and
 - One new or expanded biofuel production facility production over 60 million gallons biofuels/year fully permitted
- **Beginning in 2031, CI reduction target cannot increase beyond 10% until:**
 - A JLARC review has been completed, and
 - The 2033 legislative session has adjourned

HB 1091 (Clean Fuel Standard)

Deferral of CFS

- **Fuel Supply Forecast**
 - If Commerce's FSF projects that the amount of credits available during the compliance period will be less than 100% of the credits projected to be necessary to comply with the CFP
 - One calendar quarter < FSF deferral < compliance period
- **Emergency Deferral**
 - Must be issued in "extreme and unusual circumstances which prevent the distribution of an adequate supply of renewable fuels" needed for compliance
 - Result of "a natural disaster, act of God, a significant supply chain disruption, or another event that could not reasonably have been foreseen or prevented, and is in the public interest to grant the deferral"
 - Deferral applies only for the shortest time necessary to address circumstances

HB 1287: ZEV Planning

HB 1287 (ZEV Planning): A summary

Basics

- Implementing Agency: WSDOT, with support from Commerce, Ecology, and office of Equity
- Summary: 1) EVSE mapping & forecasting tool 2) Utility ZEV & EVSE load planning 3) SBCC residential & commercial building rules
- Who's impacted: EVSE planners/implementers/users, electric utilities
- Effective date: N/A

HB 1287 (ZEV Planning)

Mapping & Forecasting Tool: Deliverables

- Publicly available tool that provides locations and essential information of charging and refueling infrastructure to support forecasted levels of EV adoption, travel and usage across WA
- The M&F tool must enable “coordinated, effective, efficient and timely deployment” of infrastructure to support statewide and local transportation efforts that result in emissions reductions consistent with RCW 70A.45.020 (GHG reduction targets)

HB 1287 (ZEV Planning)

Mapping & Forecasting Tool: Function

- **The tool must:**
 - Initially prioritize on-road transportation
 - Maintain latest “data”
 - Model charging and refueling infrastructure that may be used by light, medium and heavy-duty vehicles
 - Incorporate WSDOT’s traffic data

HB 1287 (ZEV Planning)

Mapping & Forecasting Tool: Function

- **The tool must, if feasible:**
 - Provide the data necessary to support TE programs by state agencies
 - Provide data at a scale that supports electric utility planning for the impacts of TE both system wide and on specific components of the distribution system
 - Forecast statewide ZEV use that would achieve RCW 70A.45.020 targets; can reference SES forecasts
- **The tool can expand to include maritime, public transportation and aviation end-uses**

HB 1287 (ZEV Planning)

Mapping & Forecasting Tool: Elements

- The amount, type, location, and year of installation for EVSE that is expected to be necessary to support forecasted EV penetration and usage within the state
- EV adoption, usage, technological profiles, and other characteristics necessary to model future EV penetration levels and use cases
- Estimated energy and capacity demand based on EV and EVSE profiles
- Public interface designed to provide any user the ability to determine the forecasted charging and refueling infrastructure needs within a provided geographic boundary

HB 1287 (ZEV Planning)

Mapping & Forecasting Tool: Elements

- **Boundaries of political subdivisions including:**
 - Retail electric utilities
 - Public transportation agencies
 - Municipalities
 - Counties
 - And federally recognized Tribal Governments
- **Existing and known publicly or privately owned level 2, DCFC, and refueling infrastructure**
- **Gas stations, convenience stores, and other small retailers that are collocated with existing and known EVSE**

HB 1287 (ZEV Planning)

Mapping & Forecasting Tool: Equity

- **Tool must:**
 - support highly impacted communities and vulnerable population disproportionately burdened by transportation-related emissions
 - Ensure economic and mobility benefits flow to communities that have historically received less investment in infrastructure
- **Integrate population, health, environmental, and socioeconomic data on a census-tract basis.**
- **Tool must integrate cumulative impact analyses best practices and identify disproportionately impacted communities**

HB 1287 (ZEV Planning)

Mapping & Forecasting Tool: Scenarios

- Varying levels of public transportation utilization
- Varying levels of active transportation usage
- Vehicle-miles traveled amounts above and below the baseline
- Forecasts capturing each utility service area's relative level of ZEV use that would achieve each utility service area's relative emissions reductions consistent with RCW 70A.45.020

HB 1287 (ZEV Planning)

Utility ZEV and EVSE planning

- **Integrated resource plans must have analyses that include:**
 - Load forecasts that consider anticipated levels of ZEV use in a utility service area (can use M&F tool)
 - Analysis, research, findings, recommendations, actions, and any other relevant info found in TE plans
 - Assumed use case forecasts and the associated energy impacts (can use M&F tool)
- **Applies to both mandated IRPs and elective IRPs**

HB 1287 (ZEV Planning)

SBCC Rules

- **Regarding “electric vehicle charging capability at all new buildings that provide on-site parking:”**
 - Rules adopted must exceed for all types of residential and commercial buildings to the extent necessary to support anticipated levels of ZEV use that result from ZEV mandate and align with RCW 70A.45.020
 - Rules must be implemented by 7/1/2024 and be periodically updated
- **Also included residential R-3 in current 10% requirements**

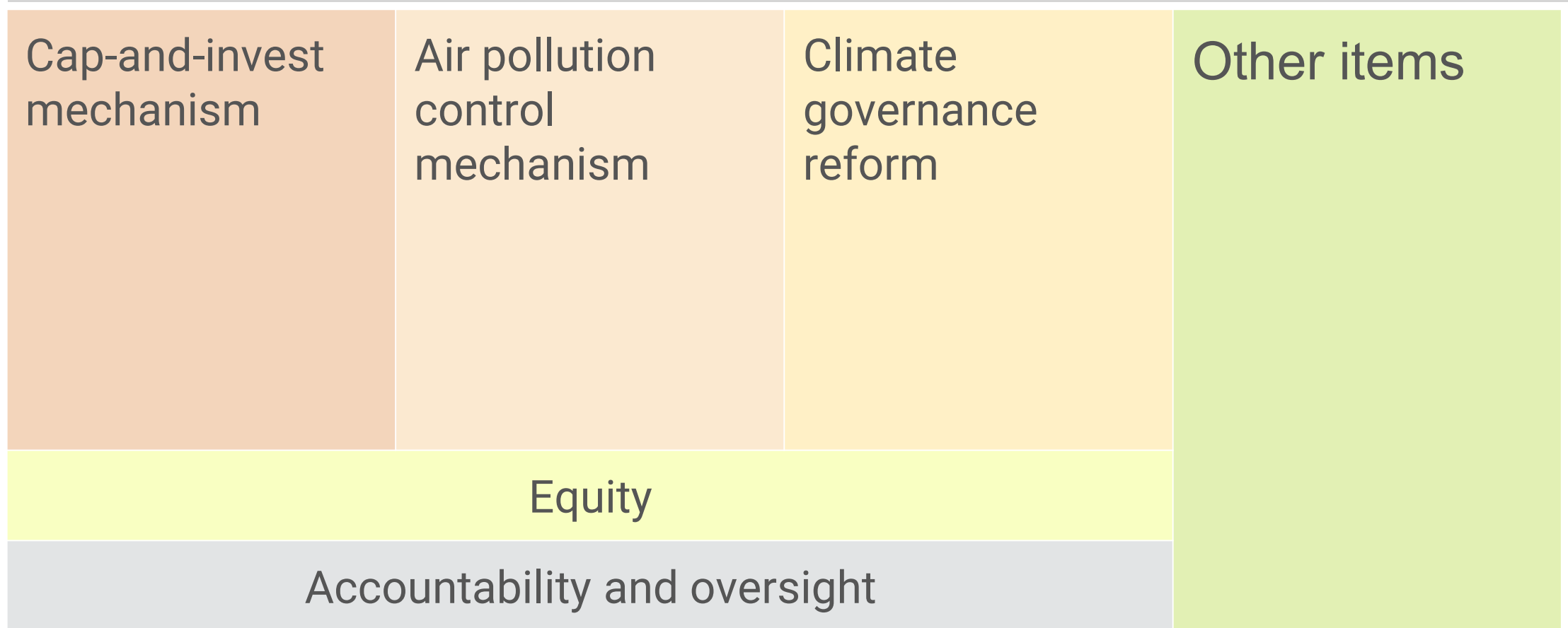
HB 5126: Cap & Invest

SB 5126(Cap & Invest):A summary

Basics

- Implementing Agency: Ecology, with a number of other agencies
- Summary: Caps statewide emissions on most sectors and creates tradeable allowances; uses funds to support climate change reduction and resilience activities
- Who's impacted: Industrial, transportation, electric, natural gas and building sectors
- Effective date: 1/1/2023

The Climate Commitment Act buckets

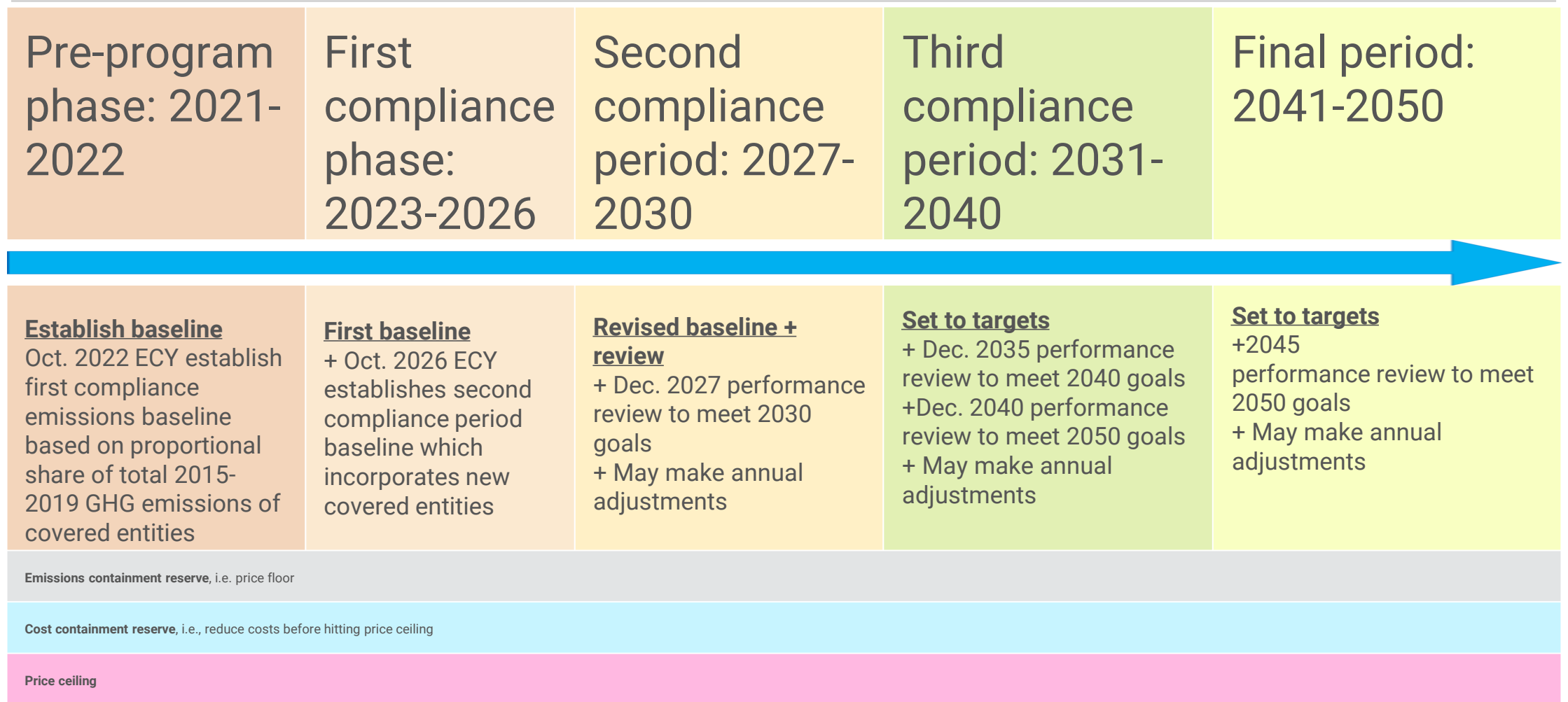


SB 5126(Cap & Invest)

Mechanism

- GHG emissions cap and subsequent reductions must be consistent with statewide emissions limits; emissions baseline based on 2015-2019 reported GHG data
- Compliance periods are four years; 1st compliance period is 1/1/23 – 12/31/26 and allowance budgets must be adopted by 1/1/2022
- Subsequent compliance periods follow similar structure but baseline is adjusted for new covered entities
- 2031-2040 annual allowance budgets will be set by rule

The declining cap



SB 5126(Cap & Invest)

Covered Entities

- A covered entity is a person who has reported emissions or provided data that indicates emissions equal or exceed a threshold of 25,000 metrics tons of CO₂/year
- Activities include:
 - Facilities
 - Electricity generated in the state
 - First jurisdictional deliverer importing electricity into the state from specified r unspecified sources
 - Fuel suppliers other than natural gas
 - Natural gas suppliers to non-covered entities
- Waste-to-energy facilities, landfills, and railroad companies become covered entities in later compliance periods
- Opt-in entities and “general market participants” may voluntarily participate and register in the program

SB 5126(Cap & Invest)

Exemptions

- Combustion of aviation fuel
- Watercraft fuels
- Coal-fired electric generation
- CO2 emissions from the combustion of biomass or biofuels that have a 40% lower GHG emissions based on a full-life cycle analysis compared to petroleum fuels
- Motor vehicle and special fuel used for agriculture purposes
- National security facilities

SB 5126(Cap & Invest)

No-cost allowances

- Emissions intensive, trade-exposed facilities receive allowances at no cost
 - Decreases from 100% allocation to 94% allocation by third compliance period
 - EITEs must purchase additional allowances if their emissions exceed allocation
 - Special provisions to aerospace products and parts manufacturing to accommodate growth
 - Ecology provides a report to the Legislature describing alternative methods for EITE allowances from 2035-2050.
 - Ecology must submit agency request legislation in 2022 short session that outlines a compliance pathway specific to EITEs for achieving proportionate share of GHG reductions through 2050

SB 5126(Cap & Invest)

No-cost allowances

- **Electric utilities**
 - COUs and IOUs will be allocated allowances subject to CETA
 - Allocations must be consistent with a forecast of each utility's supply and demand as well as cost-burden for inclusion in compliance pool
 - Allowances must be consigned to auction for the benefit of ratepayers, deposited for compliance, or a combination of both
 - Utilities may not receive free allowances after 2045 (CETA zero-emissions date)
 - Ecology, Commerce and UTC must develop rules; rules must consider the impact of electrification of building, transportation, and industry

SB 5126(Cap & Invest)

No-cost allowances

- **Natural gas utilities**
 - Natural gas utilities will be allocated allowances that must be consigned to auction for the benefit of ratepayers, deposited for compliance, or a combination of both
 - 65% of no cost allowances, increasing at 5% annually, must be consigned to auction to benefit customers, prioritizing LI customers (e.g., nonvolumetric credits, weatherization, decarbonization, conservation, or bill assistance)
 - Nonvolumetric credits are reserved exclusively for existing customers only (except for new LI customers)

Offsets

First compliance period

+ Offsets \leq 5% of covered entities obligation and \geq 50% must be sourced from projects that provide direct environmental benefits in the state

+ An additional 3% available if projects take place on tribal lands

Second compliance period

+ General offsets \leq 4% of covered entities obligation and \geq 75% must be sourced from projects that provide direct environmental benefits in the state

+ An additional 2% available if projects take place on tribal lands

Remaining periods

+ Continuation of second compliance period unless Ecology decides after consulting with the public to make changes via rule.

State can restrict offset options for egregious polluters in overburdened communities

Extensive rulemaking is required

The investment accounts

Carbon Emissions Reduction Account

- + May only be used for transportation carbon emission reducing purposes
- + May not be used for 18th amendment purposes
- + Includes investments in alternatives and reductions to single-occupancy passenger vehicle use through alt. fuel infrastructure and incentives
- + Emission reduction programs for freight, ferries and port activities
- + Total deposits into CER account must not exceed \$5.2b over 16 years

Climate Investment Account

- + 75% goes to the Climate Commitment Account
 - + 25% Natural Solutions Account
 - + High workforce standards
 - + Women and minority owned business preferences
- Climate Commitment Account** activities:
- + Reduce and mitigate GHG and co-pollutants in overburdened communities
 - + Clean grid, buildings, and other projects
 - + Improve EE for space and water heating
 - + Assist with clean energy transition and assist affected workers
 - + CO2 removal
 - + Climate mitigation and adaptation projects for Tribes

Air Quality and Health Disparities Improvement Account

- + Not less than \$20 million per biennium be dedicated
- + The direct reduction of environmental burdens in overburdened communities
- + The reduction of disproportionate, cumulative risk from environmental burdens, including those associated with climate change
- + The support of community-led project development, planning, and participation costs
- + Meeting a community identified need that is consistent with the HEAL Act (SB 5141)

SB 5126(Cap & Invest)

Auction Proceeds

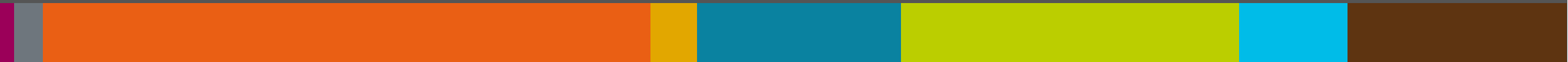
- **CC Account**
 - Implement working families tax rebate
 - Supplement the GMA planning and environmental review fund
 - Support GHG reducing activities
 - Reduce and mitigate GHG and co-pollutants in overburdened communities, including strengthening the air quality monitoring network
 - Deploy renewable energy resources
 - Increase EE or reduce HG of industrial facilities
 - Achieve EE or emission reduction in agricultural sector
 - Increase EE in new and existing buildings
 - Promote electrification and decarbonization of new and existing buildings
 - Improve EE for space and water heating
 - Assist with clean energy transition and assist affected workers
 - Allow the diversion of organic materials from landfills
 - Deploy CO2 removal
 - Support efforts to mitigate and adapt to the effects of climate change affecting Indian Tribes

SB 5126(Cap & Invest)

EJ

- **EJ review**
 - Ecology must conduct an EJ review every 2 years to ensure C&I program achieves reductions in criteria pollutants as well as GHG emissions in overburdened communities highly impacted by air pollution
 - Ecology must establish air quality targets; identify stationary and mobile sources that are the greatest contributors; achieve the reduction targets; adopt stricter air quality standards, emissions standards, or emissions limitations; and enforce stricter standards
- **EJ Council**
 - 5141 council must provide recommendations to the Legislature, agencies and the Governor on development and implementation of the C&I program as well as programs funded from auction revenues

HB 5141: EJ Implementation



SB 5141 (EJ Implementation): A summary

Basics

- Implementing Agency: Multiple Agencies
- Summary: Incorporates and operationalizes environmental justice principles into future state agency action
- Who's impacted: State agencies, local governments, communities
- Effective date: 1/1/2023 for EJ Implementation Plans

Work directed in SB 5141

- The seven agencies (Ecology, Health, Natural Resources, Commerce, Agriculture, and Transportation, and the Puget Sound partnership) covered by the HEAL Act, must:
 - Incorporate environmental justice into its strategic plan
 - Develop and adopt a community engagement plan
 - Prioritize environmental justice in its budgets and funding decisions
 - Develop consultation and coordination framework with Tribes
 - Conduct environmental justice assessments when taking “**significant agency actions**”

Significant Agency Action is at the heart of this law

- Agencies must evaluate the potential implications of **significant agency actions** on communities experiencing or at risk of environmental health risks.

Significant Agency Action is at the heart of this law

- **Significant Agency Actions include:**
 - The development and adoption of a new grant or loan program explicitly authorized by statute
 - A capital project, grant, or loan award of at least \$12M or a transportation project, grant, or loan award of at least \$15M
 - The submission of agency request legislation to the OFM or the Governor's Office
 - Any other actions deemed significant by an agency

Community engagement is critical to EJ

- **When taking significant agency action, agencies will need to:**
 - *identify* any vulnerable populations, overburdened communities, or Tribes that may be impacted by the action.
 - *consult* communities and eliminate, reduce, or prevent potential harms from being done to them and ensure they benefit from the action.

More details on incorporating environmental justice into agency work

- Requires agencies to *identify environmental justice goals and propose a strategy and timeline* for reaching them.
- Need to *establish clearly defined metrics* that can be used to measure and *track progress* towards achieving its environmental justice goals set forth in its strategic plan, community engagement plan, and budgets.
- Sets a goal of allocating 40% of grants and expenditures that create environmental benefits to communities experiencing or at risk of environmental health risks.

New EJ Council

- Advises covered agencies on incorporating environmental justice into agency activities.
- Will make suggestions to agencies on all matters of environmental justice and review agency progress on goals as well as the efficacy of agency environmental justice assessments.
- None of the EJ Council's recommendations are binding; they are merely advisory

New EJ Council

- **Consists of 14 members appointed by the Governor:**
 - 2 environmental justice practitioners;
 - 1 at large representative; and
 - 11 members representing communities, tribes, businesses, and workers.
 - Council members must be persons who are well-informed of and committed to the principles of environmental justice.

New Interagency Workgroup

- Established by Department of Health
- May include council members
- Assists covered agencies in implementing new environmental justice requirements
- Provides technical assistance to support agency compliance

HB 5192: EVSE Regulations

SB 5192(EVSE Regulations): A summary

Basics

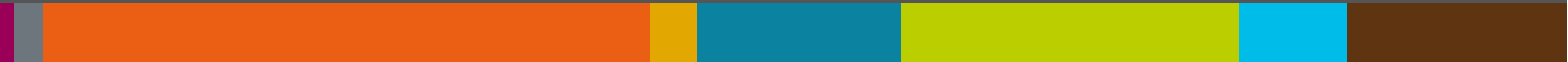
- Implementing Agency: Department of Agriculture, W&M
- Summary: Increases accessibility, interoperability, and consumer protection of publicly available EVSE
- Who's impacted: EVSE owners and operators (“electric vehicle service provider”)
- Effective date: Varies

SB 5192(EVSE Regulations): A summary

Four components

- Signage requirements for cost to use
- Payment options and supporting un(der)banked users
- Interoperability
- Reporting requirements

Transportation Budget



Transportation Budget

Innovative Partnerships Office

- Clean vehicle refueling infrastructure: \$8.9m for highway corridor charging and refueling
- Clean vehicles in underserved communities: \$2.4m for pilots in low and moderate income communities not currently served by transit
- HB 1287 implementation: \$140k for stakeholder and assessment
- Wenatchee Charging and Refueling: \$1.5m for dual-sited project
- Mount Vernon Fast Charging: \$250k for “mega” EVSE installation

Transportation Budget

WSDOT Transportation Planning, Data & Research

- RUC Research: \$4m for ongoing exploration of RUC policy impacts and opportunities
- VMT Update: \$250k to partner with Commerce to develop VMT targets for high density and high growth counties.

Transportation Budget

WSDOT Public Transportation

- Green Transportation Capital Grants: \$21.8m for full biennium
- Regional Mobility Grants: \$104m
- Connecting WA grants: \$28.2m
- WSU GTP Funding(!): \$555k
- First-last Mile Connections: \$800k
- Fuel Type Consideration: Vetoed again (currently being litigated)

Transportation Budget

WSDOT Ferries

- Two diesel-electric hybrid vessel conversions: \$24.7m
- New diesel-electric hybrid vessel: \$152m (Gov requested funding for two)

Capital Budget



Capital Budget

Clean Energy Fund

- Grid Modernization: \$17.5m (\$11 is competitive)
- RD&D: \$10.8m (\$5m is for match; the remainder is direct approp)
- Non-profit lending: \$2.5m
- ETS: \$5.5m (\$3m is competitive)
- Electric buildings: \$10m (\$5m for electric heat pump and other programming for resi and commercial buildings)
- Maritime electrification: \$4.9m (all direct)
- Rural Innovation: \$4.9m (\$150k for outreach strategies)

Capital Budget

Ecology

- Reducing Toxic Wood stove Emissions: \$3m
- DERA: \$15m

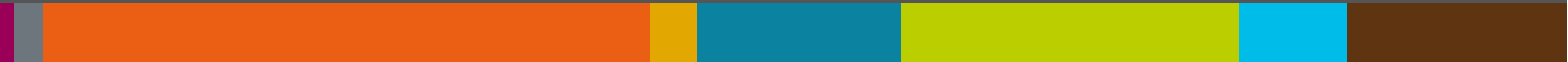
Parks

- EV Charging stations: \$175k

Misc.

- Embodied carbon reporting for state agencies

Operating Budget



Operating Budget

Commerce

- SES implementation: \$1.35m for related to building emissions
- State Building Materials: \$425k for UW contract for database, reporting system and case study
- Biochar R&D: \$160k NPO grant for RD&D efforts in Methow Valley
- Local Government GHG Reduction Policies: \$3.2m for interagency development of VMT, GHG reductions and resilience
- Industrial waste: \$500k for implementation of industrial waste coordination program

Operating Budget

Other

- OFM Net Ecological Gain Standard: \$256k for report on ways to incorporate concept into statute
- UTC utility decarbonization efforts: \$450k for report on reduction options and customer impacts
- Ecology Solid Waste grants: \$14m for local government programs
- WSU Solar Siting Pilot: \$500k for least-conflict utility-scale solar stakeholder process and mapping

Thank you!



Washington State
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