

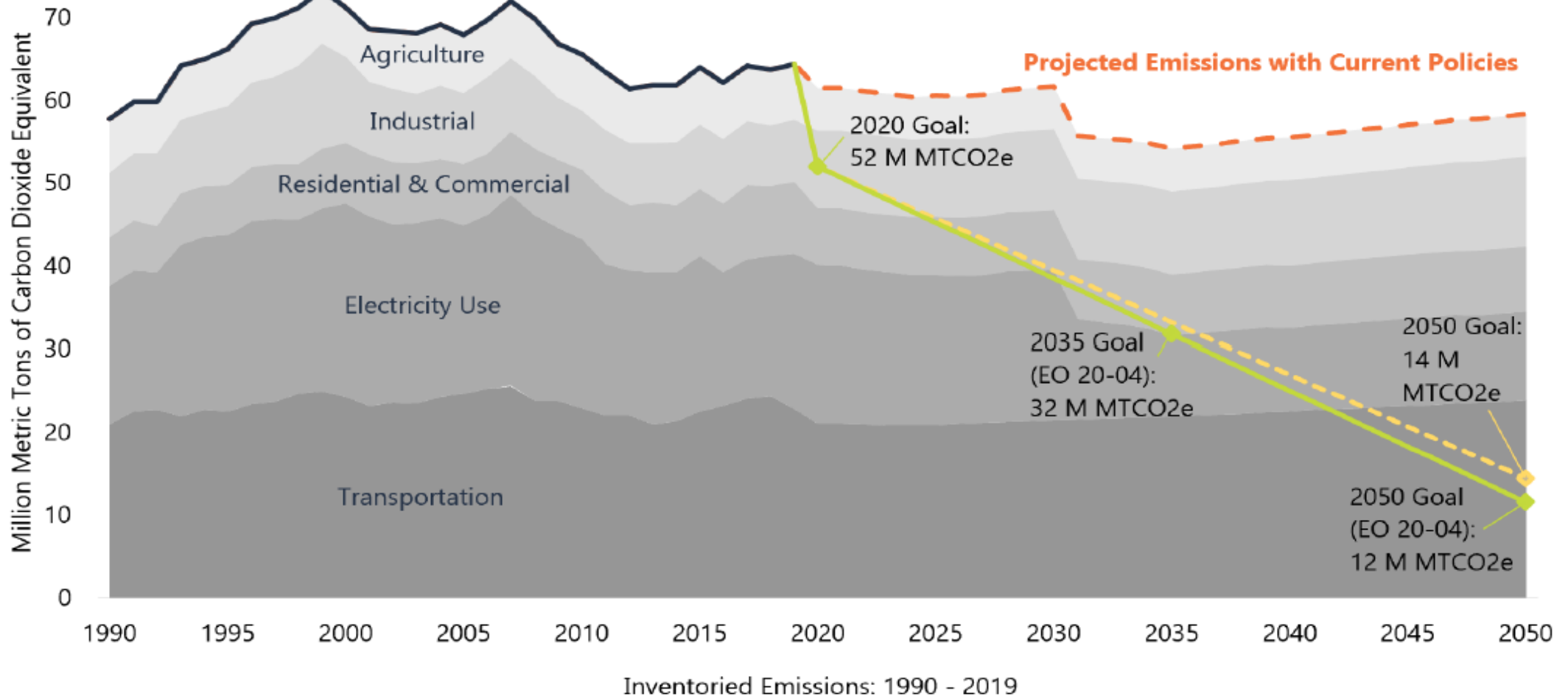


Oregon Clean Fuels Program Overview

Clean Fuels Standard Workshop
Santa Fe, New Mexico
September 30 – October 1, 2021

Cory-Ann Wind, Oregon Clean Fuels Program Manager

Oregon's Greenhouse Gas Emissions



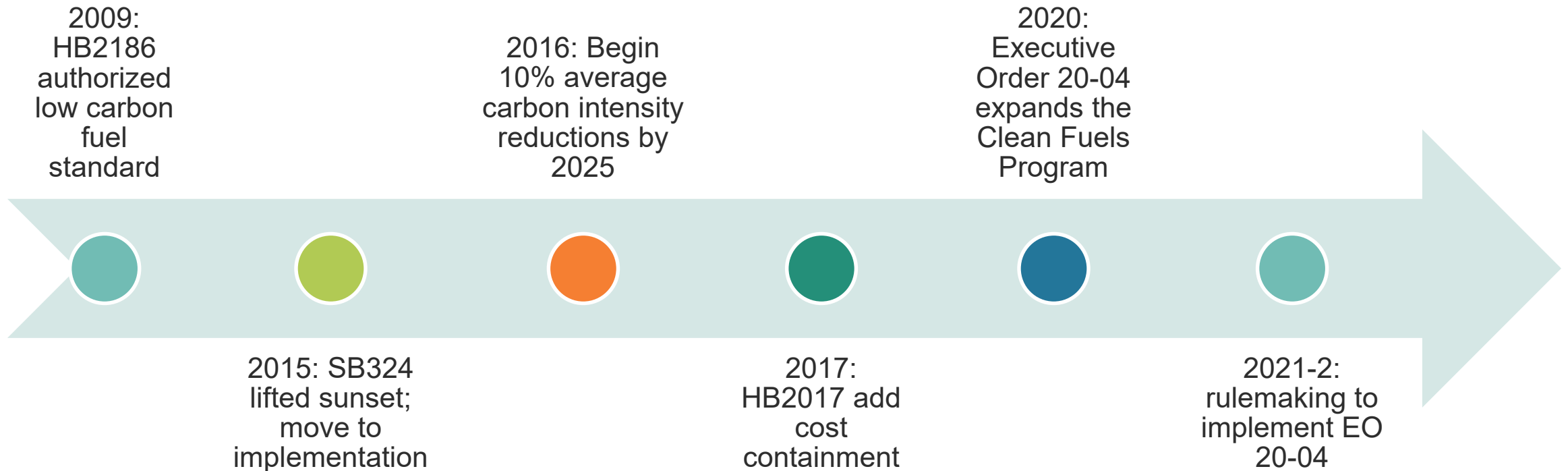
Oregon's Decarbonization Strategy

- Climate Protection Program (proposed) - set limits on GHGs from significant sources in Oregon, including large stationary sources, transportation fuels, and other liquid and gaseous fuels
- Clean Fuels Program – reduces the average carbon intensity of Oregon's transportation fuels
- Clean Energy mandate – sets reduction requirements for Oregon's energy
- Light-Duty ZEV standards & Medium/Heavy-Duty ZEV standards (proposed)
- Transportation Planning Rule - connects VMT & GHG reductions in MPOs
- Statewide Transportation Strategy – recommends strategies to reduce GHGs from transportation-related activities

Oregon's Transportation Fuels Story

- About 10% of California's fuel consumption – about 1.4 billion gallons of gasoline and 760 million gallons of diesel
- Currently meeting the ozone and NOx standards
- Renewable fuel standard mandated B5 and E10 in on-road
 - Considered part of the baseline
 - Blending infrastructure was widely in place
- No in-state refineries and limited in-state production of biofuels
- Major terminals just across the border in Washington and Idaho - lots of movement of fuels across the borders

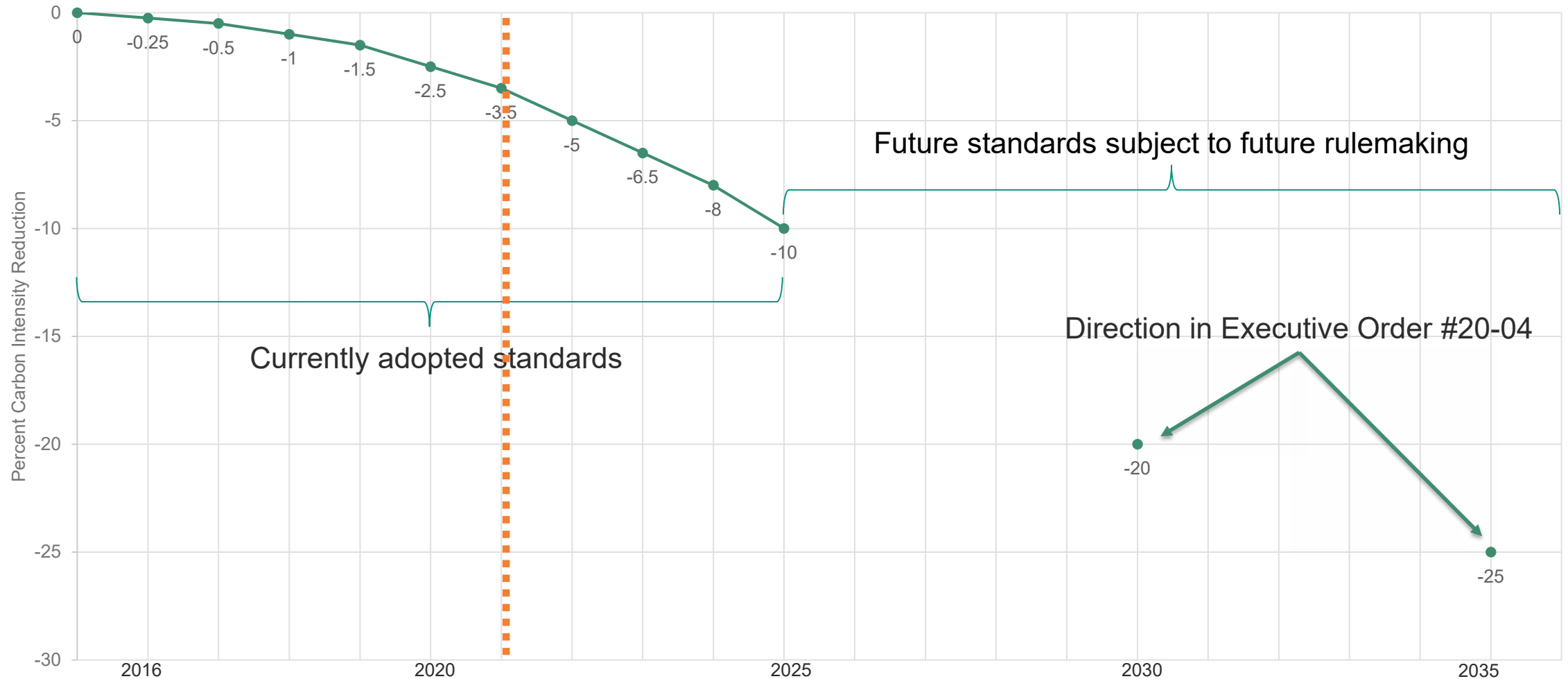
Oregon Clean Fuels Program History



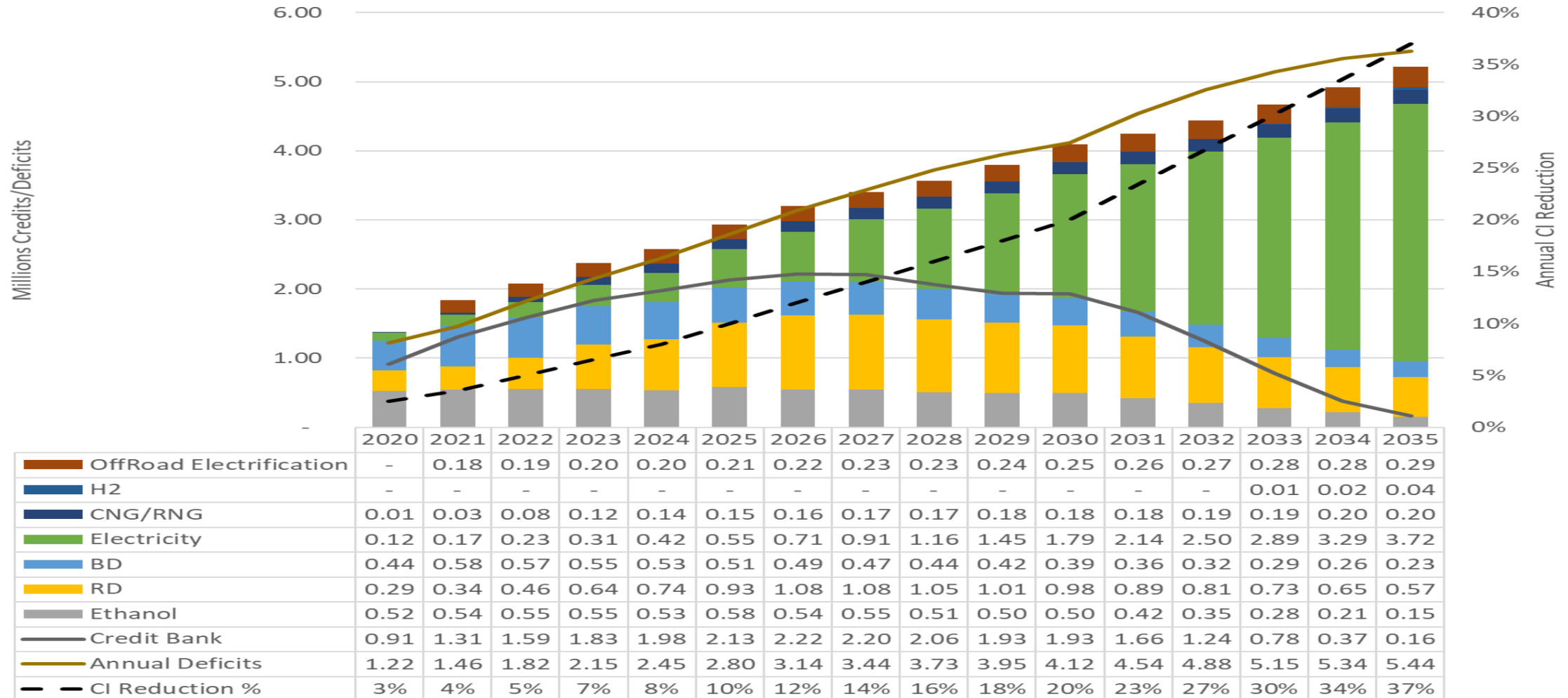
Executive Order 20-04

- Expand the Clean Fuels Program to achieve a 20% reduction in the carbon intensity of transportation fuels from its 2015 baseline by 2030 and 25% by 2035
- Advance methods to accelerate the generation and aggregation of clean fuels credits by utilities in order to advance transportation electrification.
- Align fleet management, procurement, and contracting processes at state agencies to complement the Clean Fuels Program

Oregon Clean Fuels Standards



Potential Future of the Clean Fuels Program



Since 2016, the Clean Fuels Program has...

- Reduced about 5.3 million tons of GHGs on a lifecycle basis
- Met and exceeded the CFP GHG reduction standards every year
- Supported the displacement of about 1 billion gallons of fossil fuels
- Lowered the carbon intensity of ethanol and biodiesel by about 20%
- Increased the blend rate of biodiesel & renewable diesel to about 13%
- Enabled the state's utilities to invest almost \$20 million in EV projects

The Clean Fuels Market and Its Impact

- The Clean Fuels Market is worth approximately \$155 million.
- There are many ways to comply with the program. Parties can generate their own credits; acquire credits when they buy the biofuels; and buy credits in the CFP market.
- The current credit price is about \$125.
- In 2020, about \$70 million worth of credit transfers were reported to CFP. That amount has already been exceeded in the first 8 months of 2021.
- In 2020, the cost of complying with CFP was 3.71 cents per gallon of E10 and 4.24 cents per gallon of B5. This is a conservative calculation based on the assumption that a regulated party will buy all their obligations through the credit market, which is the most expensive way to comply, and does not account for lower fuel costs associated with many of the alternative fuels.

Where Oregon & California are Aligned

- Models to calculate carbon intensity - GREET & OPGEE
- Fuel pathways - CARB-approved pathways can be submitted to Oregon with an adjustment to the transport distance
- Web-based reporting system – our OFRS uses the LRT-CBTS as the base code then modifies it for use in Oregon
- Third-party verification - to be approved in Oregon, a verifier must be accredited by CARB then pass the Oregon exams

Where Oregon & California Differ

Things Oregon has that California doesn't:	Things California has that Oregon doesn't:
1 credit must equal 1 tonne of GHG reductions	Capacity credits for H2 and DC fast chargers
The indirect land use change value for corn-based biofuels is based on CCLUB	The indirect land use change value for corn-based biofuels is based on GTAP
Electricity provisions: <ul style="list-style-type: none"> • Backstop Aggregator – gather unclaimed base residential credits to fund EV pilot projects • Incremental Aggregator – gather unclaimed incremental credits to fund EV projects that benefit EJ communities • Advance Crediting – up front loan of credits to support targeted EV fleet conversion 	Residential electricity credits: <ul style="list-style-type: none"> • Must be spent on EVs • Are used to fund EV rebates • Go to automakers that provide telematics
Provide a single reporting system with the DEQ GHG reporting program	Resources and authority to: <ul style="list-style-type: none"> • Develop new ZEV and fuel standards • Incent vehicle purchases and infrastructure

Lessons Learned

- Build a broad coalition of support – multiple fuels & technologies, fuel users, fleets, other market participants, utilities, environmental & health advocates
- Include phase-in period for reporting-only to allow time for start-up, compliance assistance, and learning
- Set up the program and avoid messing with it but acknowledge that small tweaks will be necessary to respond to changes in the market
- Avoid including mechanisms that would automatically trigger re-evaluation of targets or adjusting targets downward

Questions?

Clean Fuels Program web page:

<https://www.oregon.gov/deq/ghgp/cfp/Pages/default.aspx>

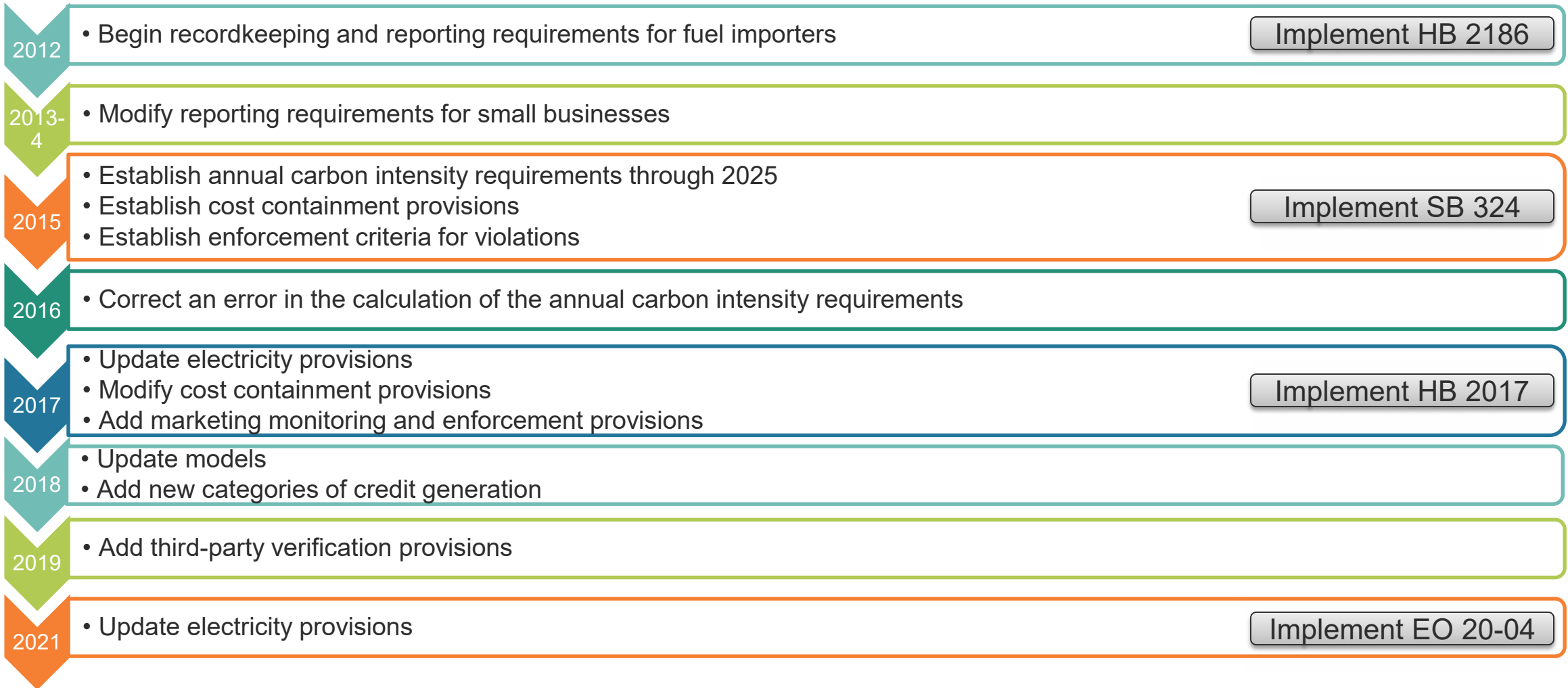
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History of Clean Fuels Program Rulemaking

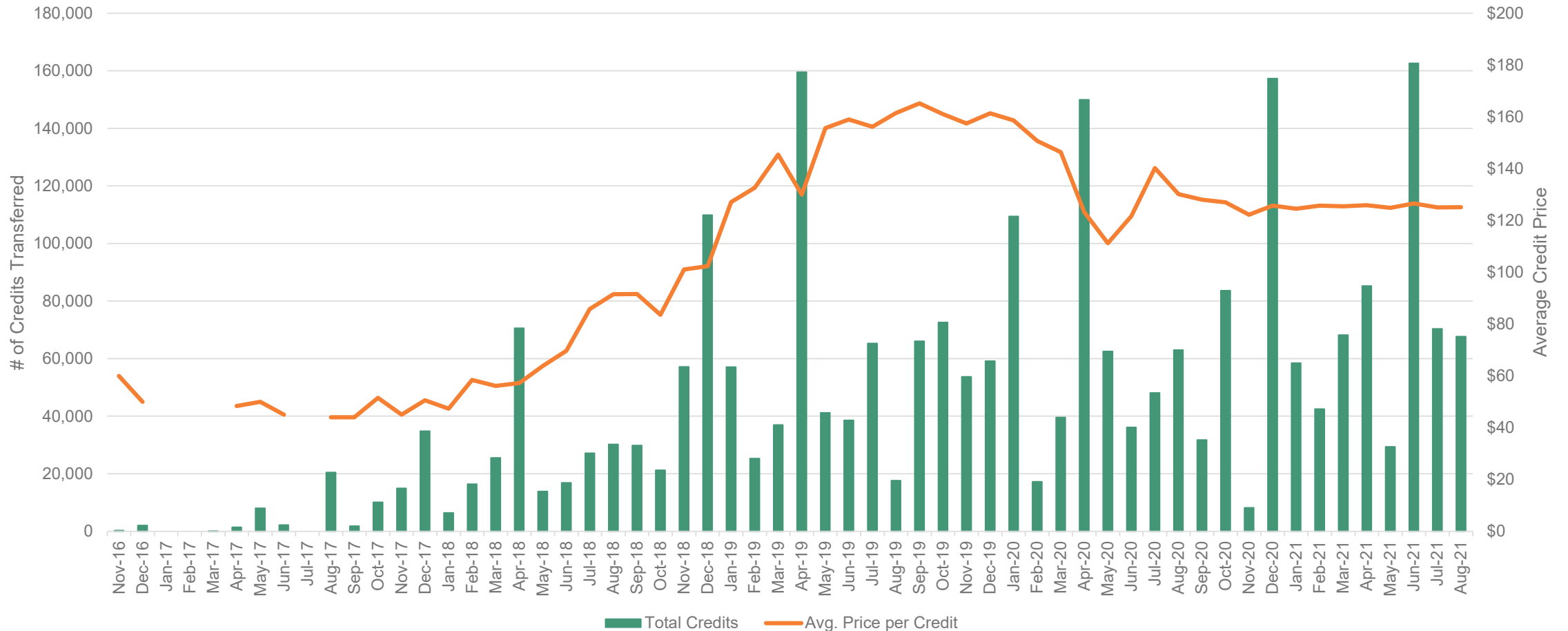


Consideration of Resource Needs

- On-going rulemaking
- Fuel pathway approval
 - Recertification of California-approved pathways
 - Approval of unique pathways
- Technical assistance to registered parties
 - Reports and auditing
 - Credit transfers
- Third-party verification
- Enforcement
- Market monitoring
- IT Infrastructure

Monthly Credit Transfer Reports

Monthly Credit Transfer Data



Quarterly Data Summaries

Credits and Deficits

