

 Corporate Action & Disclosure Requirements

Cap-and-Trade Programs

Transportation Emissions





#### **GHG** Emission Reporting

• GHG Emissions: Scope 1, 2, and 3

 Longstanding GHG Reporting Requirements

Voluntary Company Reporting



## Company Goals, Pledges, and Targets

#### Commits to Net Zero By 2040



**Announces Pledge to Achieve Net-Zero Carbon Emissions Globally by 2030** 

> A third of the world's largest companies now have net-zero targets

Announces a Net Zero Emissions Commitment



### **Greenwashing?**

Global corporations' climate pledges are 'misleading,' not credible

COP27 - Corporate climate pledges rife with greenwashing - U.N. expert group

Corporate climate pledges are falling short

The False Promise of Corporate Carbon Neutrality

Top 24 Multinational Companies' Climate Pledges 'Lack Integrity' Corporate Climate Promises Don't Add Up

Multinationals charged with greenwashing as they fail to meet climate pledges

Corporate climate pledges are weaker than they seem

Climate pledges from top companies crumble under scrutiny



## **Public Company Regulation**





2010 Guidelines

March 2022 Proposed Rule

March 2024 Final Rule

#### **SEC** Rule

#### **Regulation S-K**

Quantitative and qualitative disclosures in periodic filings

- •GHG emissions. For LAFs and AFs, Scope 1 and 2 emissions, if material.
- •Governance. Board's oversight of and management's role
- •Strategy, business model, outlook. Climate-related risks that have materially affected or are reasonably likely to have a material impact.
- •Material expenditures and impacts. Material expenditures incurred and material impacts on financial estimates
- Risk management.
  - Processes for identifying, assessing, and managing material climate-related risks.
  - Plans to mitigate transition risks.
- •Targets and goals. Material climate-related targets and goals.

#### **Regulation S-X**

Disclosures in footnotes of financial statements

- •Severe weather and other natural conditions. Aggregate expenditures incurred and losses, and aggregate capitalized costs and charges, if exceed specified thresholds.
- •Carbon offsets and Renewable Energy Certificates. The aggregate amount of carbon offsets and RECs expensed, if material to the company's plans to achieve disclosed climate-related goals.
- •Estimates and assumptions. Financial estimates and assumptions materially affected by severe weather events, other natural conditions, or any disclosed targets or transition plans.

#### **Climate-Related Risks**

Climate-Related Risks							
Transiti Actual or potential negative im results of operations	Physical Risks  Extreme weather events or natural conditions that may pose risks to a company's business operations						
Regulatory	Market	Acute					
<ul> <li>Pricing of GHG emissions</li> <li>Exposure to litigation</li> </ul>	Changing customer     behavior     Increased cost of raw     materials	Increased severity of extreme weather events     Hurricanes, tornadoes, floods, heatwaves					
Technological	Reputation	Chronic					
Investment in new technologies     Costs of transitioning to lower-emissions tech	Shifts in consumer preferences     Stigmatization of industry	<ul><li>Rising temperatures</li><li>Rising sea levels</li><li>Wildfire risks</li><li>Drought</li></ul>					

Source credit: Adapted from I4CE, TCDF, Recommendations of the Task Force on Climate-Related Financial Disclosures (2016).



#### California SB 253 & SB 261

#### SB-253 Climate Corporate Data Accountability Act. (1907) 1929

feet Was entry \$6 Annual Today Law At Arwalds C Company Wester Status Surrents to Autor NAME THE PARTY IN

make mandated, 10/29/2002 decide the

#### Senate Bill No. 253

#### CHAPTER 282

An act to add Section 36532 to the Health and Safety Code, relating to greenloose gases, and realing an appropriation therefor

| Approved by Governor Conserv 07, 2003 Filed with Secretary of State October 07, 2003 |

#### LEGISLATIVE COUNSELS DIGEST

SE253. Week Classes Consists Data transmission Sci.

The California Global Warming Solutions Act of 2000 requires the State Air Resources than to satisfy regulations to require the reporting and nethrodom of abstracting grantings gas increasing and to recotor and antique compliance with the left. The left requires the lates Sould to reake available, and applied at best according or its natural velocity the evidence of presentance general relations, and toxic oir contaminants for each facility than reports to the integ based, as provided.

The full angul angula the gots beard, or in before leaves L. 2025, to develop and adopt regulations requiring appointed partnership connections, broked balable references, and other baseway entries with final properly receives in sources of \$1,000,000,000 and that the Inspects in California, defined on "reporting critical," in publicly decision to the necession reporting properties, on defined, and obtain or common engagement on, starting or 2008 or a date to be determined by the state based, and annually december, they scope I and scaps 2 greenteries gas consistent, as defined, only starting to 2007 and accounty thereafter, their scape 2 greenteries gas exclusive, as defined. Note the expected, and By's print faced plant, as provided. The fell would be send the state beard to choose the major 2008, and quelyeon necessary as as before languary 1, 2016, these describes to evaluate benth at arope 3 evaluate reporting and to mender charges to the destines, as provided. The bill would require a reporting entity to obtain an assurance angagement, performed by an independent the spots markets provides of the critical public disclours as provides. The fell would require the state board, in developing these regulations, to consist with the Attorney General, rather government attainment, exceptors, statesharbers representing comprise and processed using viewals, and reported pricing that have determined belonds in his own presenting are processed accurating and public distance and generation are remaine emissions. The toll model also require the tight must be expected for septions proper retrines the real for reprinting entities to engage multiple assumest, provides and enumers officially assumests. provide reports, as well as troop reporting engineeration, as required. The full would halfve require the date based to contract with an emission reporting organization to develop a reporting program to receive and make publicly available the required discharges. The tell would authorise the loste beant, storting in 2003 and overy 5 years develope, to assess the plobal greenhouse yas accounting and reporting attended to and its adopt on advantative standard if it information that using the attended or facilities which make affectively forther

This bill would require the state board, on or before 3dy 1, 2527, to commit with the University of Cultimos, the California State interests, a coparal infantitivy, or another equivalent academic mattains to pregate a report or the public classicance made by reporting arbbat to the crisistes rejetting organization. The Bill would require, in property the report, consideration to be given to, at a manusco, grandados pos errados foro incortas extres o the cornel of size previous per acossome relativo and distain male. The bill would be state liberal to provide the report to the amission reporting segaratelist to good on a signal platform that equals he required to be consist by the emissions reporting regarisation, and publicly accomplie, to below, the state beant's report and the reporting ordered subtle stackscores. The last enable require the excessions opporting organization to provide the extensional injuries that released policy committees of the Lagalabury.

This bill would require a reporting entry, upon Filing 4s distingent, to pay to the state frozed an entrol for set, by the state frozed, as provided. The left would vicate the Christe Associately and Enteriors Goldgorn Fond, require the provided of the less to be deposited. or the West, and community appropriate the modeys or the Parel to the most facing for purposes of the left. By creating a community superprised bad, the full would report an appropriation. The full would require the time board to adopt regulations that authorize it inneed administrative parallel for violations of these provides, as apositive.

Note: Preparty - Appropriates: yes - Pacal Committee: yes - Local Program; no-



#### 5B-261 Greenhouse gases: climate-related financial risk, (1923-1936)



#### Setute Bill No. 261

#### CHAPTER 383

An act to add Section 38513 to the Health and Safety Code, relating to greenhouse gases, and making an appropriation therefor.

| Approved by Governor October 07, 2021. Filed with Secretary of State. October 07, 2023. |

#### LEGISLATIVE COUNSEL'S DIGEST

SEX1, Stem. Sweethouse green directs rolated françail real.

The California Guital Warming Solutions Act of 2006 requires the State Air Resources floord to adopt regulations to require the reporting and verification of statewise greenlosse gas emissions and to monitor and enforce compliance with the act, The act requires the stateboard to make available, and update at least annually, on its internet website the emissions of preenhouse cases, criteria policitants, and toxic air contaminants for each facility that reports to the state board, as provided.

This bill would require, or or before January 1, 2026, and bermally thereafter, a covered entity, as defined, to prepare a climate-related financial raik report disclosing the entity's climate-related financial raik and researce adopted to reduce and adapt to climate-related financial risk, The bill would require the covered entity to make a cupy of the report available to the public on its own internet website.

The bill would require the state bound to commad with a climate reporting organization, ox defined, to blendally prepare a public report that contains specified information, including a review of the disclosure of climate-valued francial tisk contained in a subset of publicly available climate-veleted financial risk reports and an analysis of the systemic and section-ide climate-related financial risks facing the state. The bill would require the state board to adopt regulations that authorize it to seek administrative penalties from covered embles for failing to make the report publicly available on its internet website or publishing an madequate or insufficient report, as specified.

The full would require covered entities to pay an annual fee for the state baietly actual and reasonable costs to advisester and implement. the bill. The bill would preste the Climate-Related Financial Risk Disclosure Fund, require the proceeds of the less to be deposited in the find, and continuously appropriate the moneys in the fund to the state board for purposes of the bill. By creating a continuously appropriated fund, the fall would make an appropriation.

Yota: respectly. Appropriation, yes: Fasal Committee: yes: Local Program: na





### **Economy Wide – Market Mechanisms**

Cap and Trade / Cap and Invest

Carbon Tax



### **Federal Government**





### Regional Greenhouse Gas Initiative



States

Sectors

Mechanics

Results

### **RGGI Allowance Auctions**

#### Allowance Prices and Volumes

Auction	Date	Quantity Offered	CCR Sold	Quantity Sold	Clearing Price	Total Proceeds
Auction 63	2024-03-13	15,855,879	8,416,278	24,272,157	\$16.00	\$388,354,512.00
Auction 62	2023-12-06	22,090,709	5,565,291	27,656,000	\$14.88	\$411,521,280.00
Auction 61	2023-09-06	21,948,358	0	21,948,358	\$13.85	\$303,984,758.30
Auction 60	2023-06-07	22,026,639	0	22,026,639	\$12.73	\$280,399,114.47
Auction 59	2023-03-08	21,522,877	0	21,522,877	\$12.50	\$269,035,962.50
Auction 58	2022-12-07	22,233,203	0	22,233,203	\$12.99	\$288,809,306.97



## California Cap-and-Trade Program

Scope

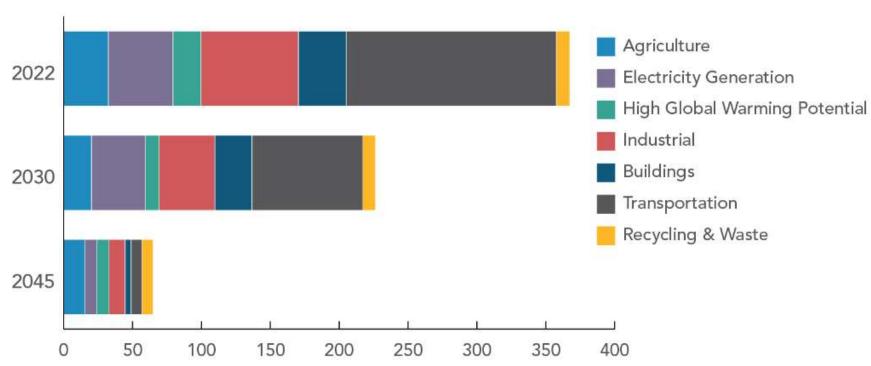
Goal



Mechanics

## California 2022 Scoping Plan







## Washington

Executive Order



Litigation

Climate Commitment Act









## Oregon – Climate Protection Program

**Executive Order 20-04** 

Climate Protection Program, OAR 340-271

Litigation

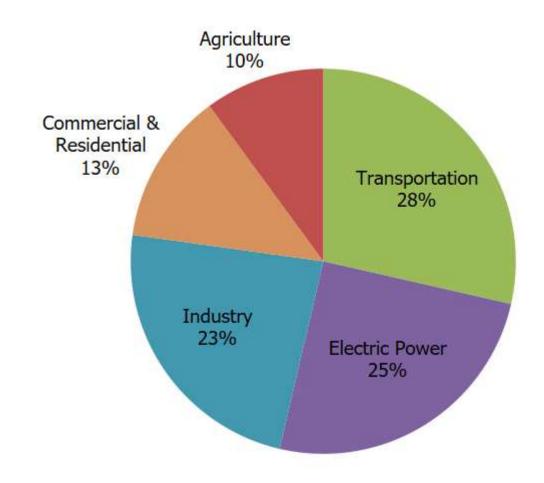








#### Transportation GHG Emissions



Total U.S. Greenhouse Gas Emissions by **Economic Sector in** 2021

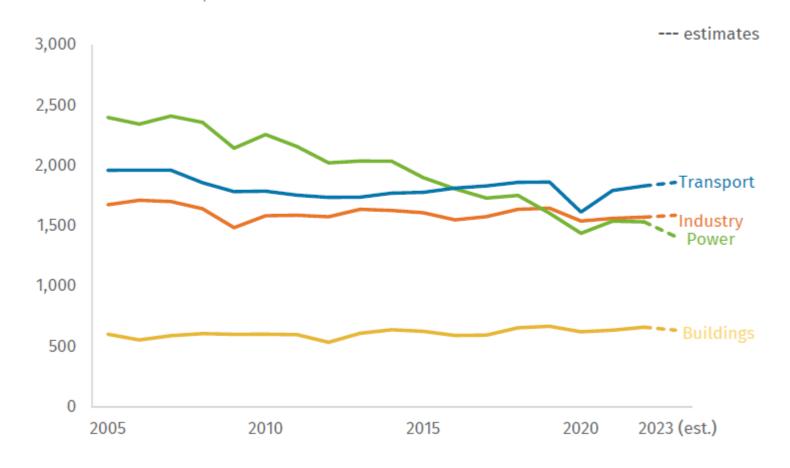
EPA, Sources of GHG Emissions



### Transportation Emissions Still Increasing

#### US GHG emissions by major emitting sector

Million metric tons CO2-equivalent



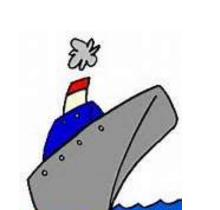
Source: Rhodium Group



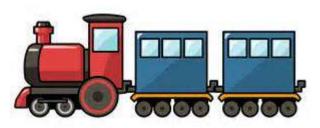
## **Transportation Emissions**





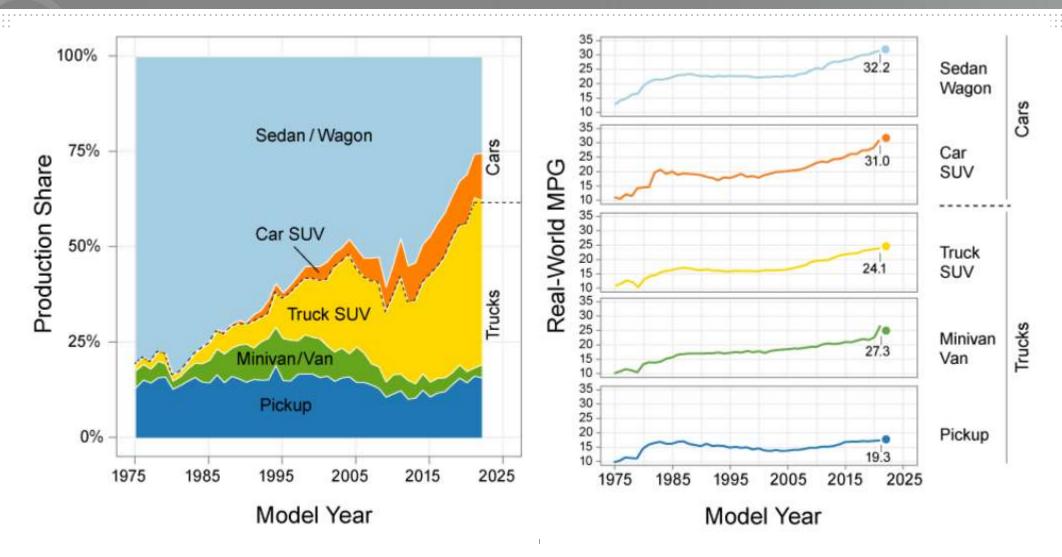








### Fuel Efficiency



## Electric and Hydrogen Fuel Cell Vehicles











### Fuel Efficiency Regulation

#### **Clean Air Act Section 202:**

The Administrator shall by regulation prescribe (and from time to time revise) in accordance with the provisions of this section, standards applicable to the emission of any air pollutant from any class or classes of new motor vehicles or new motor vehicle engines, which in his judgment cause, or contribute to, air pollution which may reasonably be anticipated to endanger public health or welfare.

### Fuel Efficiency and GHG Emissions

Obama Administration

Trump Administration

Biden Administration



#### California

 Low Emission Vehicle Program

 Zero Emission Vehicle Program



#### Other States

#### Clean Air Act Section 177

Notwithstanding section 7543(a) of this title, any State which has plan provisions approved under this part may adopt and enforce for any model year standards relating to control of emissions from new motor vehicles or new motor vehicle engines and take such other actions as are referred to in section 7543(a) of this title respecting such vehicles if—

- (1) such standards are identical to the California standards for which a waiver has been granted for such model year, and
- (2) California and such State adopt such standards at least two years before commencement of such model year (as determined by regulations of the Administrator).



## Carbon Intensity of Fuels



 Federal Renewable Fuel Standard

State Clean Fuel Standards

### Federal – EPA Renewable Fuel Standard

RFS Program

Litigation

Small Refinery Exemptions



## **State Programs**

- California Low Carbon Fuel Standard
- Washington Clean Fuel Standard
- **Oregon Clean Fuels Program**



#### **Funding Infrastructure**

# DOT announces \$623 million in grants support EV charging infrastructure

California Set to Distribute \$40 Million to Build EV Fast Chargers

With influx of state and federal funding, Illinois looks to add enough chargers to support 1 million EVs

\$23 Million In Federal Funds Awarded To Expand Michigan EV Infrastructure

Oklahoma Department of Transportation Receives 8 Million for I Infrastructure Expansion Another round of federal EV grants to fund existing EV charging options in 20 states

PennDOT announces funding for EV infrastructure projects

Wisconsin is closer to building out an EV charging network



