Vermont Participation in the Transportation and Climate Initiative – Public Update #2

Winter 2020



Meeting Goals

- Review of TCI program proposal
- Review of latest modeling results
- Get your feedback
- Next steps



Why Should We Reduce Emissions?



Why Should We Reduce Emissions?

- VT Federal Disaster Declarations
 - -2011: 4 events (inc. Irene), \$234M
 - -2012-2018: 1-2 events a year, average \$2.8M
 - -2019: October flood event est. \$4.5M



Vermont GHG Emissions

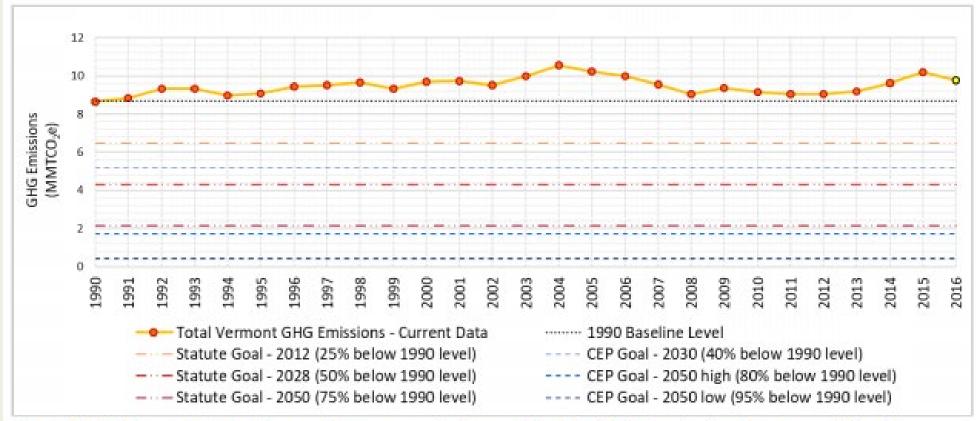
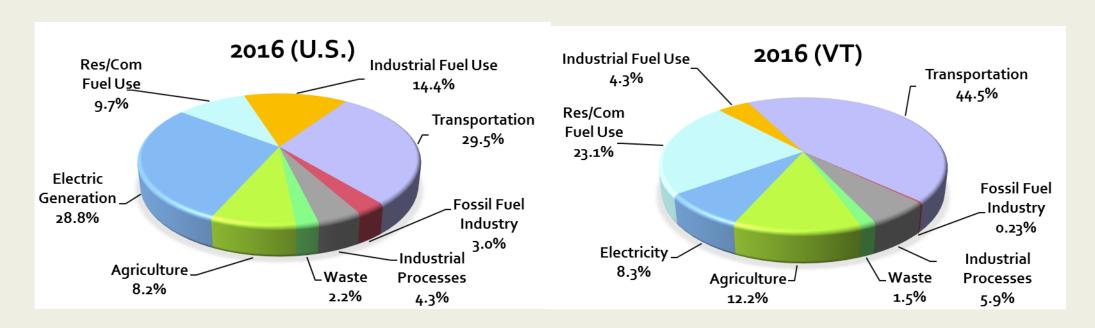


Figure ES-1: Vermont statewide greenhouse gas emissions and levels of GHG emissions targets as defined in 10 V.S.A. § 578 and in the Comprehensive Energy Plan (CEP) published by the Vermont Department of Public Service.



Why Focus on Transportation Emissions?





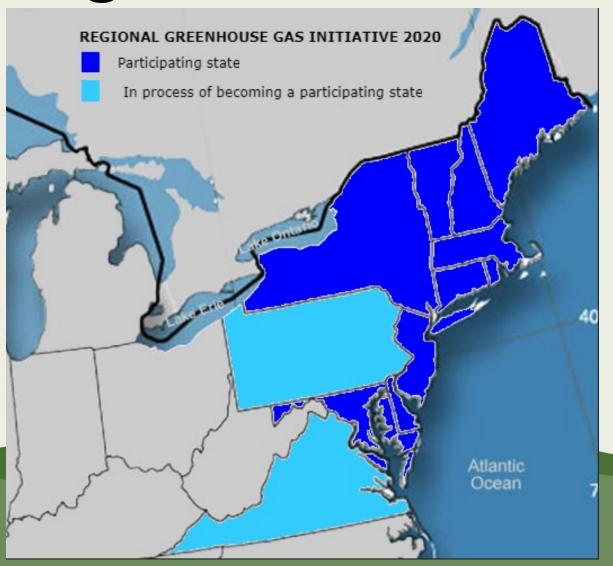
Regional Model for Success - RGGI



- Nine Northeast and Mid-Atlantic states launched RGGI in 2009
- Major power plants are required to buy allowances at auctions or from each other
- States invest revenue into efficiency and other initiatives that drive down consumer demand
- Net result: More than 40% reduction in emissions at lowest cost
- Lifetime energy bill savings of \$9,271,415,070 (as of 2017)

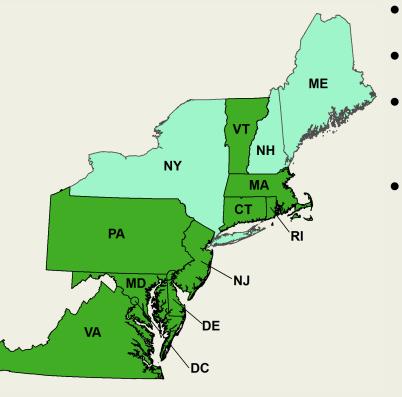


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TCI Overview



- Working since 2010 to address transportation emissions
- Engaged the public in regional listening sessions in 2018
- December 2018 jurisdictions commit to year-long joint program development
- Program goals
 - Reduce carbon emissions
 - Utilize a market-based mechanism (cap-and-invest)
 - Invest proceeds to reduce emissions, increase resiliency, and provide net economic and social benefits

TCI Regional Policy Proposal Schedule

Current Stage

Release draft regional policy proposal framework

Gather public input on framework

Release regional policy proposal as draft Memorandum of Understanding (MOU)

Gather and consider public input on Draft MOU and MOU.

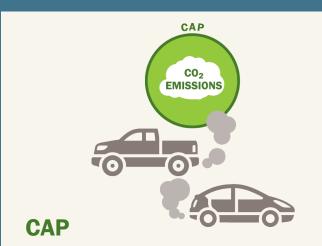
States develop a model rule, take legislative steps to implement regional program

2022

Program implementation begins



Cap and Invest: How it Works



A limit, or cap, is set on the amount of carbon dioxide $({\rm CO_2})$ that is released from vehicles using transportation fuels. The initial cap is based on a baseline or "business as usual" scenario and that cap may be reduced over time.

ALLOWANCE

Transportation fuel suppliers must obtain an allowance for every ton of carbon dioxide resulting from the fuel they sell.





AUCTION

The total number of available allowances is limited based on the cap. An auction is held. Transportation fuel suppliers (and other entities that wish to trade or retire them) can bid on available allowances.

INVEST

States receive payments based on the revenues raised from the sale of allowances. States invest proceeds to reduce transportation carbon emissions through subsidies of lower carbon transportation options.



TCI Program – How Would It Work?

- Cap ensures reductions would occur; market determines cost of reductions
- Emissions reductions result from investments and complementary policies
- Equity a top priority
- Overall health and macroeconomic benefits



TCI Program Framework

- Equity Affected Fuels and Emissions
- Regulated Entities Emission Reporting Requirements
- Monitoring and Verification Flexibility & Cost Containment
- Auctions and Allocation Regional Caps & Allowance
- **Budgets Market Monitoring & Auction Administration**
- Investment of Proceeds Complementary Policies



Equity







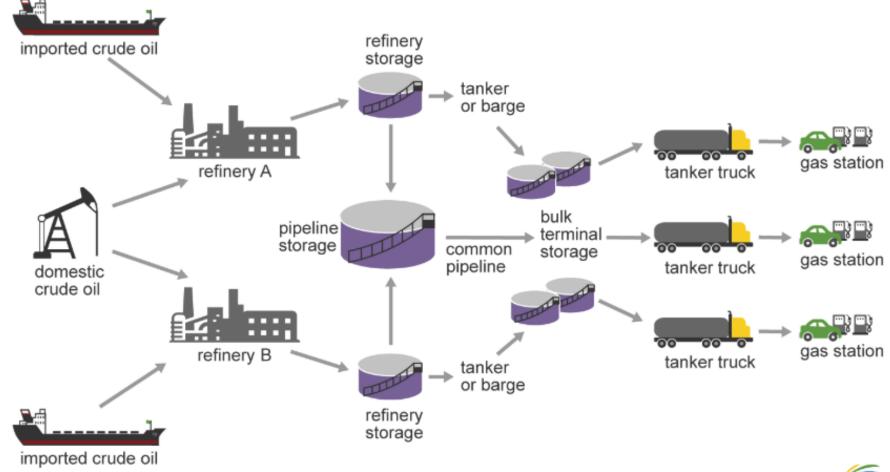
- Fundamental tenant of program
- Addressed at the state level
- In VT, issues are affordability and access to options

Affected Fuels and Emissions



~VERMON7

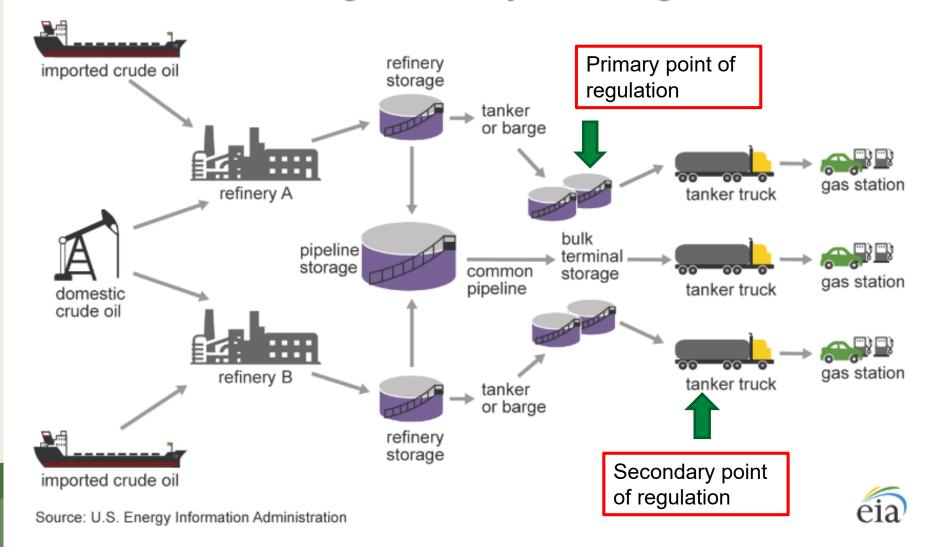
Flow of crude oil and gasoline to your local gas station

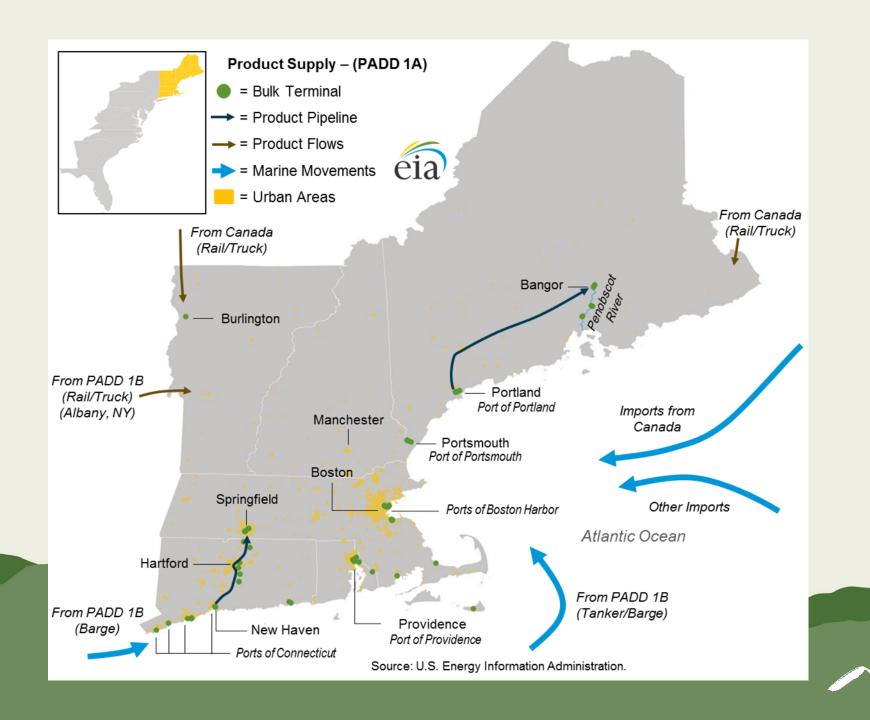






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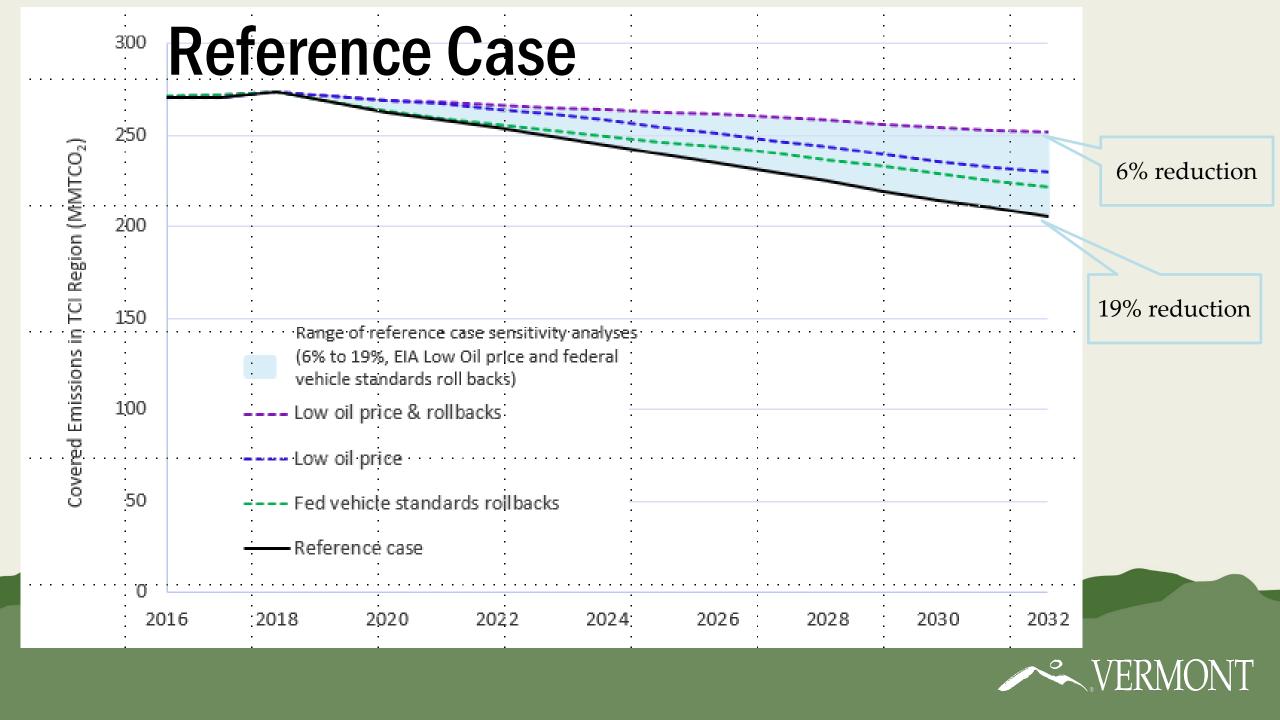


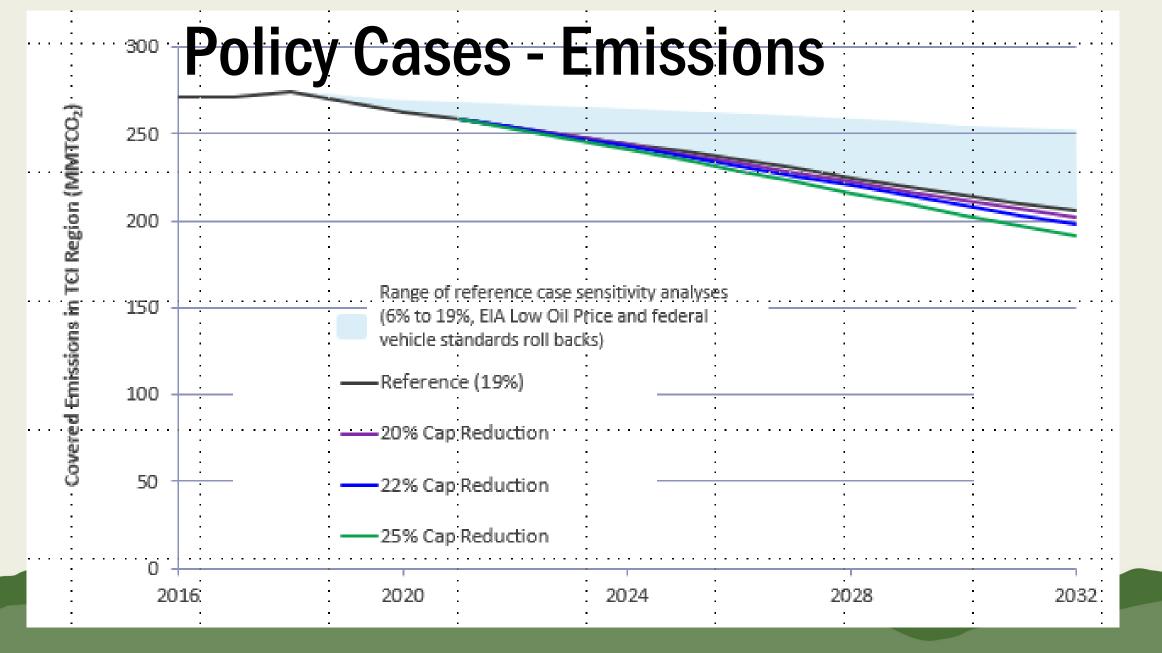


Regional Caps and Allowance Budgets

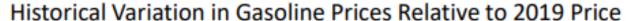
- -Initial cap that declines every year
- Set by combination of 3-year baseline emissions + modeling
- Program start as early as 2022



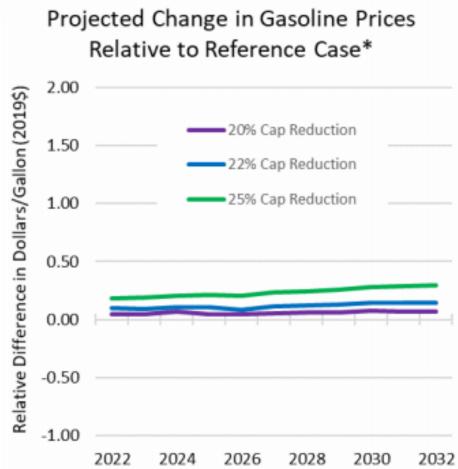




Policy Cases – Fuel Price









How would this impact Vermonters?

	20% Cap Reduction with Investments Policy Case		22% Cap Reduction with Investments Policy Case		25% Cap Reduction with Investments Policy Case	
	2022	2032	2022	2032	2022	2032
Allowance Prices	\$6	\$9	\$11	\$18	\$22	\$36
Price Increase at the Pump	\$0.05	\$0.07	\$0.09	\$0.14	\$0.17	\$0.29
Total Regional Proceeds	\$1.4 B	\$1.8 B	\$2.8 B	\$3.6 B	\$5.6 B	\$6.9 B
Vermont Proceeds (est.)	\$18 M	\$23 M	\$33 M	\$43 M	\$66 M	\$80 M
Public Health Benefits (Regional)	-	\$3.2 B	-	\$6.4 B	-	\$10.5 B



Investment of Proceeds

- Each jurisdiction decides independently
- Jurisdictions may have shared priorities
- Commitment to equity and meaningful community engagement



Investment of Proceeds

- Mitigating impact
- Smart Growth
- Electric vehicles
- Transit expansion and upkeep
- Active transport (bike/ped)
- Ride sharing



Complementary Policies

- To realize additional emissions reductions
- Also improve air quality, safety, and provide more transportation options
- Examples include coordinated infrastructure planning, land use planning, innovative financing



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How Do I Add My Voice?

TCI Online Regional Stakeholder Comment form:

tinyurl.com/VTTCI

Comments requested by Friday February 28



Where to learn more?

anr.vermont.gov/content/transportation-andclimate-initiative



TCI Vermont Contacts

Agency of Natural Resources - Peter Walke

VTrans - Michele Boomhower

Department of Public Service - Riley Allen

Agency of Commerce/Community

Development - Ken Jones

