What is TCI?

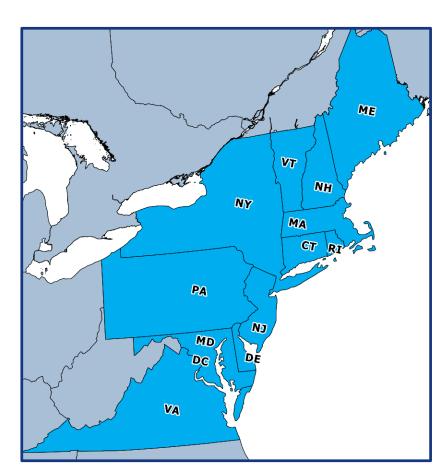
Transportation Climate Initiative

Collaborative multi-state effort to reduce carbon emissions from transportation

TCI focused on

annual carbon emissions from gasoline & diesel fuel

- = 254 million metric tons emitted annually in region
- = 254 becomes the initial carbon "cap" in TCI's Cap & Invest program



TCI in context of other carbon reduction efforts

3 Major Emission Reduction Programs/Proposals

- 1. Federal: new car emission standards (CAFE)
 - Corporate Average Fuel Economy (CAFE) standards for <u>new vehicles</u>
 - Important <u>baseline</u> for other 2
 - Current administration calling for relaxation of standards
- 2. CT: Governor's Climate Change Council (GC3)
 - Most complete approach: clean transportation, clean electric generation, clean buildings
 - 80% carbon emission reduction by 2050
- **3. TCI:** Transportation Climate Initiative
 - Focused exclusively on <u>transportation fuels</u>:
 - Gasoline
 - Diesel fuel (on-road vehicles only)

TCI in context of other carbon reduction efforts

CT: Governor's Climate Change Council (GC3)

- Addresses all <u>sources</u> of carbon emissions :
 - electric power (23%) **←**
 - transportation (35%),
 - buildings (31%)
 - minor sources: (plus industry, waste, agriculture)

Zero Carbon Electricity

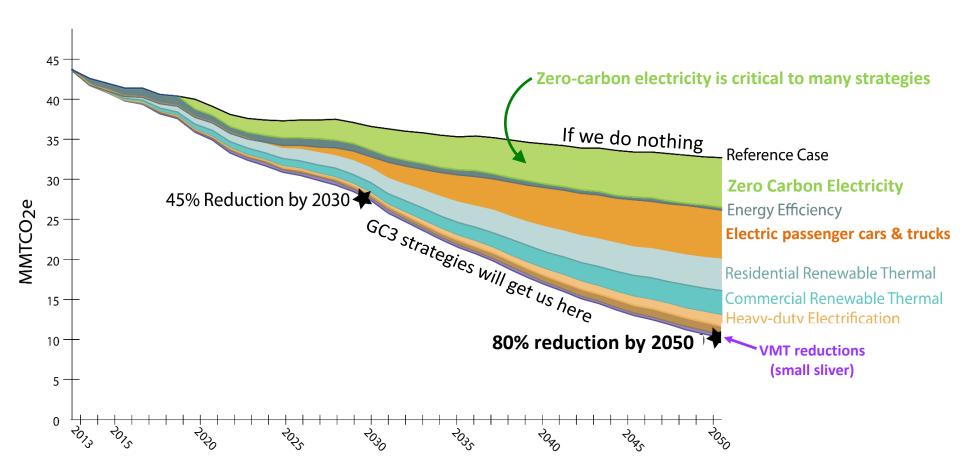
2030
66%
84%
electric generation

Clean power generation essential all other strategies

– Goals:

- 45% carbon emission reduction by 2030,
- **80**% by 2050

GC3: CT's GHG Reduction Strategies



TCI: Transportation Climate Initiative

Coalition of 12 states & D.C.

- Goal: reduce carbon emissions from transportation
- Method: "Cap & Invest" program focused exclusively on 2 transportation fuels:
 - Gasoline
 - Diesel fuel (on-road vehicles only)

Part 1: "Capping" Carbon Emissions

- place a "cap" on carbon emissions from gasoline & diesel fuels (initial = 254 MMT)
- incrementally reduce the cap to reduce fuel sales (or create cleaner fuels).
- <u>fuel suppliers</u> (~wholesalers) must <u>purchase emission "allowances"</u> for emissions they are responsible for <u>based on the volume of fuel they sell</u>
- allowances are sold at an annual auction (fuel suppliers bid to purchase)
 - Each state receives a share of auction proceeds based on its share of emissions.
 - CT would receive about 5%
 - \$70M per year (20% reduction scenario)
 - \$140M per year (22% reduction scenario)
 - \$280M per year (25% reduction scenario)

TCI: Transportation Climate Initiative

Coalition of 12 states & D.C.

Part 2: Investing auction proceeds

- "Invest" proceeds in GHG mitigation measures
 - Typical transportation measures like:
 - » Rebates for EV purchases (supplement DEEP's CHEAPER program)
 - » Investing in EV charging infrastructure
 - » Investing in more transit
 - » Fund efforts to convert 30% of CT Transit bus fleet to electric by 2030
 - » Investing in more walking and bicycling facilities (alternatives to cars)
 - » Investing in system efficiencies
- Invest proceeds in programs to ensure transportation disadvantaged populations receive an equitable share.

Cap-and-Invest: Pros & Cons

- Cap & Invest overlays other strategies aimed at reducing carbon
- Pricing carbon reduces emissions
 - A declining cap guarantees emissions reductions
 - Allowance market gives industry flexibility to innovate & implement least-cost carbon reduction strategies
- Pricing generates revenue for investment
 - Generate revenue for states to reinvest in clean transportation & infrastructure
- Pricing leads to some negative impacts
 - Higher fuel prices for residents & businesses
 - Reduced gas tax revenues

Preliminary Analysis of TCI Benefits and Costs

	Reference Case No Cap, No Investments		20% Reduction Cap With Investments		22% Reduction Cap With Investments		25% Reduction Cap With Investments	
	Α	В	С	D	E	F	G	Н
Year	2022	2032	2022	2032	2022	2032	2022	2032
Emissions (TCI Region) Million metric tons; % reduction	254 (3x RGGI)	206 -19.0%	254	202 -20.5%	254	199 -21.7%	253	192 -24.0%
Allowance Prices 2017\$ per metric ton	n/a	n/a	\$6	\$9	\$11	\$18	\$22	\$36
Program Revenue (TCI) \$billion/year	n/a	n/a	\$1.4	\$1.8	\$2.8	\$3.6	\$5.6	\$6.9
CT Share of Revenue \$million/yr; 5% share	n/a	n/a	\$70M	\$90	\$140M	\$180	\$280M	\$345
Gasoline Prices (TCI Avg.) 2017\$ per gallon in the TCI region	\$3.23	\$3.48	\$3.27 +\$0.05	\$3.55 +\$0.07	\$3.31 +\$0.09	3.62 +\$0.14	\$3.40 +\$0.17	\$3.76 +\$0.29

STATUS of TCI

TCI status

- Most states still considering whether or not to join
- Most states require new legislation to join
- Most states support goals
- Most states concerned about impact of gas prices
- COVID-19 putting a hold on TCI activities in some states.
- Do not expect CT to sign MOU this year. CT will continue participation.

