Transforming Transportation in New York

Setting an interim target to reduce emissions

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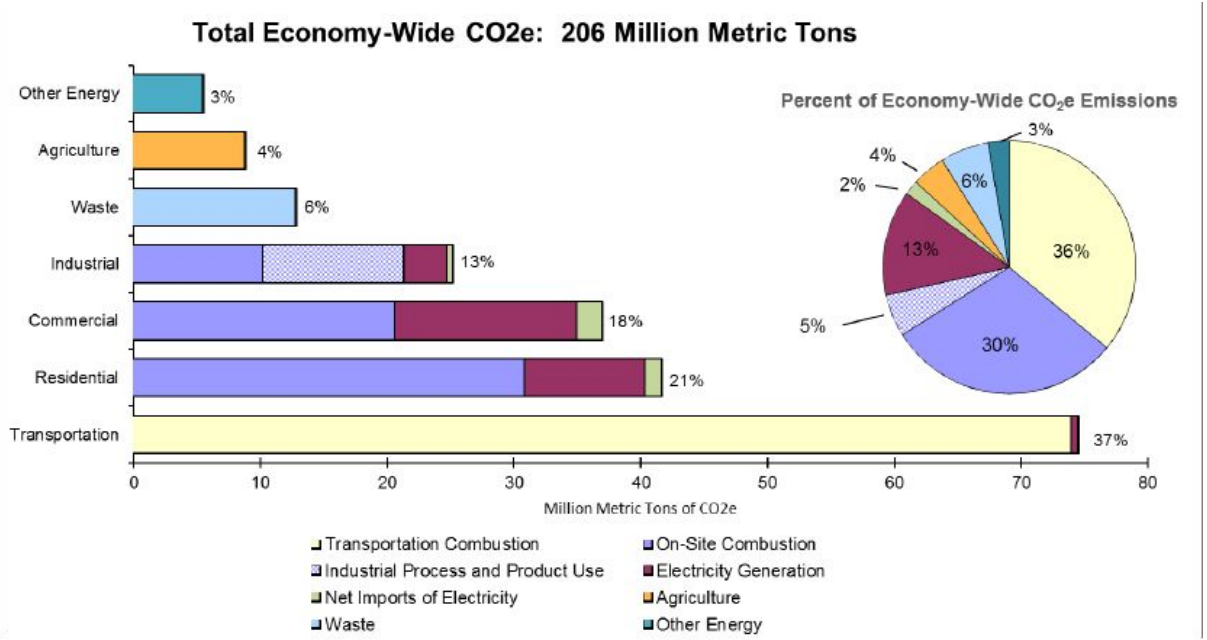
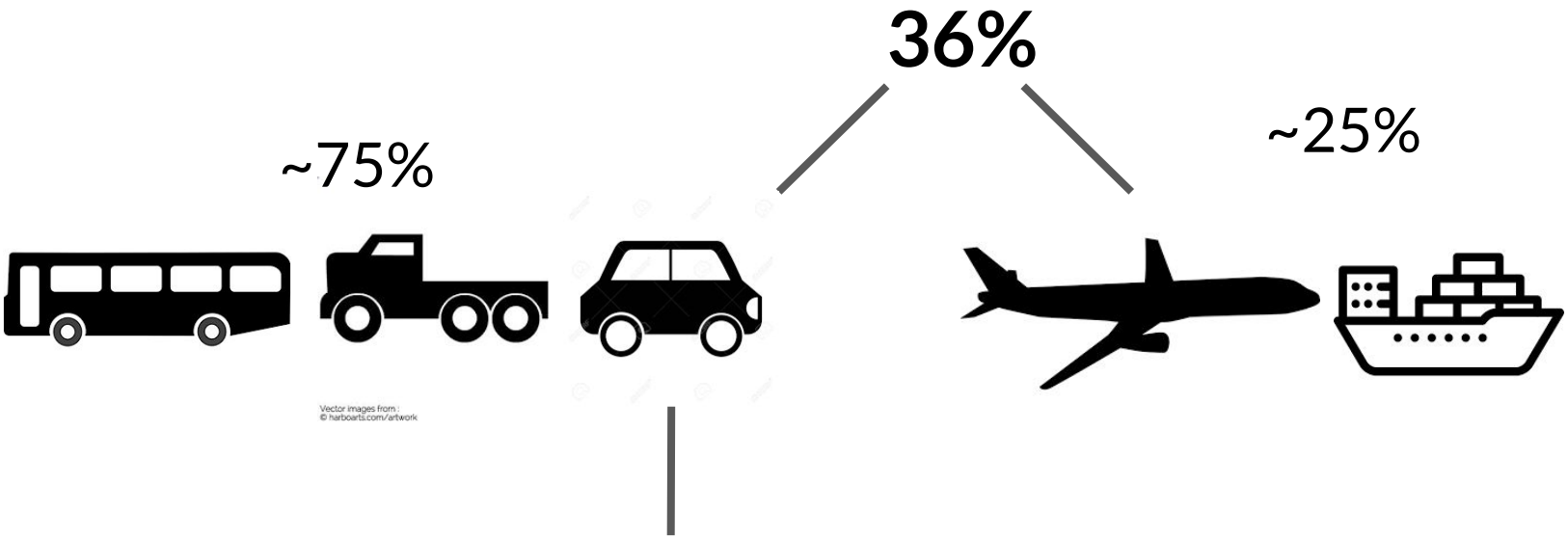
Transportation accounts for 36% of NY's climate emissions

This is the largest polluting sector in the state





82% from light duty vehicles

NY Registered Vehicles and CO2 emissions

	Vehicle Count		CO_2 Emissions	
	Vehicle #	*Percent*	*Million metric tons*	*Percent*
All motor vehicles	10,580,000	-	56.5	100%
Light-duty vehicles (LDVs)	10,120,000	96%	46.1	82%
Medium-duty vehicles (MDVs)	250,000	2%	3.1	6%
Heavy-duty vehicles (HDV): Single	80,000	<1%	1.7	3%
Heavy-duty vehicles (HDV): Combination	40,000	<1%	3.7	7%
Buses	90,000	<1%	1.8	3%
Other vehicles (airplanes, boats, and trains)	-	-	17.3	-
All transportation	-	-	73.8	-

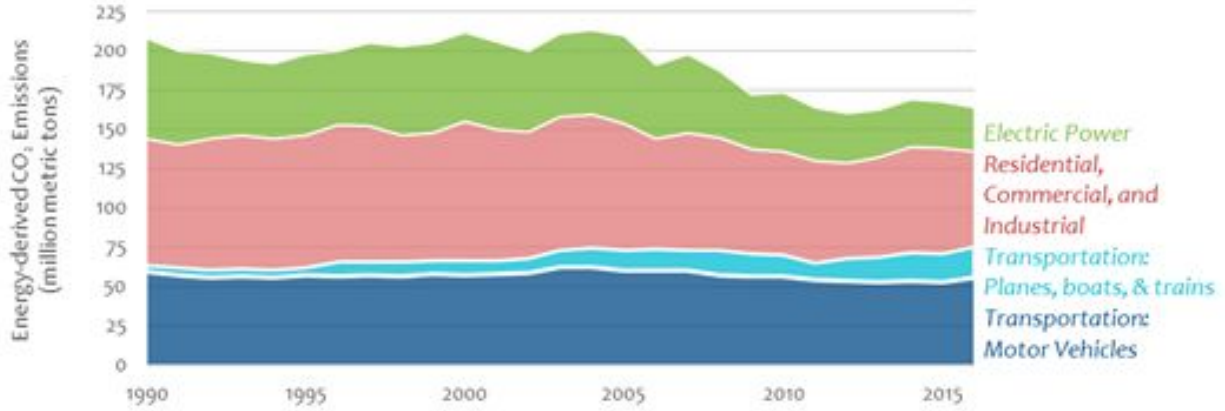
Note:

- LDVs refers to passenger vehicles
- MDVs & HDVs are trucks and larger vehicles like freight, garbage trucks, etc.
- This table doesn't account for health-harming emissions like NOx and SOx

By 2050, NY must have 100% net-zero emissions

This means the motor vehicle transportation sector will need to be almost completely zero emission.

If we keep following business-as-usual, that won't happen



Energy-derived CO2 emissions in NY. Transportation emissions have been slightly increasing over the past few years.

Reducing motor vehicle emissions

We need bold, ambitious, and specific targets to tackle this sector

In New York State, we've made amazing progress in the electric sector to green our grid and get rid of some of the most polluting sources of power like dirty coal plants.

We've set bold mandates like 70% renewable energy by 2030 and zero-carbon emission electric sector by 2040

Clean Energy Investments: The CLCPA codifies Governor Cuomo's commitments to install 9,000 megawatts of offshore wind by 2035; 6,000 megawatts of distributed solar by 2025; and 3,000 megawatts of energy storage by 2030.

Yet we've set no specific targets for reducing emissions from the transportation sector-- and setting a target could help us focus our policies and investments to ensure that we transform our transportation system at the pace and scale needed to decarbonize

New York needs action on transportation, now.

New York has the nation's most ambitious climate legislation on the books. Over 1/3 of NY's climate-disrupting emissions come from transportation. But NY still hasn't even set a target to address this polluting sector.

Governor Cuomo: Reducing vehicle emissions 55% by 2035 is possible & New Yorkers can't wait.

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Setting an interim target to reduce motor vehicles 55% by 2035 will get NY on track

Sierra Club report & our findings

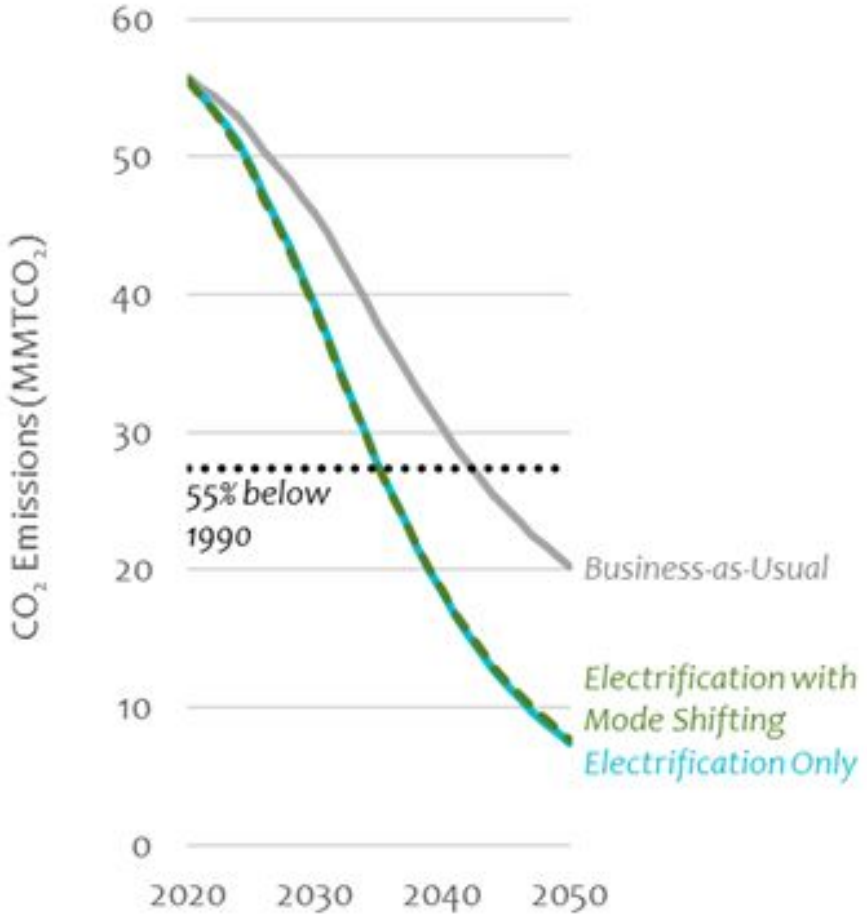
- The Sierra Club worked with Synapse Energy Economics to do research and modeling on what an aggressive but achievable interim target to 2050 could be to reduce emissions in line with our 2050 goals
- Using a consumer adoption model, we looked at the level of emissions reductions and EV sales under a business as usual scenario (current levels of EV rebates, etc.) and then at two sample policy pathways-- demonstrating that 55% by 2035 is a feasible target to reduce emissions using known and familiar policies in NY
- We were able to identify which policies really drive down emissions
- Key Takeaway: New York can't wait-- we need to take bold action now to shift New York drivers from gas-guzzling vehicles to zero-emission vehicles

Business-as-usual transportation sector ghg emission reductions are inadequate

Although transportation sector emissions are projected to decline between now and 2035, absent additional policies, the rate of decline will be insufficient for New York to meet its long-term climate obligations.

Motor vehicle CO2 Emissions

If we continue to follow Business as Usual, emissions from motor vehicle tailpipes decline by just 67% by 2050. In order to achieve 100% net zero emissions by 2050 economy-wide, motor vehicles will likely need to get as close to 100% direct reductions as possible



Why do we need to ramp up now?

Long Vehicle Lifetimes

Average passenger vehicle lifetime in NYS is 15.5 years- and for some vehicle types, even longer.

Slow rate of fleet turnover

We need clean vehicles to come onto the road as dirty vehicles come off the road-- the overall fleet makeup is what determines emissions. And this change happens slowly, meaning what we do over the next few years makes a big difference for our emissions output

Current low rate of EV adoption

There are 10.9 million vehicles registered in NYS, and only 40,000 of them are EVs-- in order to reduce our emissions we will need rapid and widespread electrification from municipalities, fleets, and individual drivers

What can New York do about this?

Potential policy pathways

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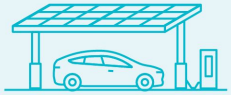
By publicly commiting to a target of reducing motor vehicle emissions 55% by 2035, NY can get the policies in place in time to reduce emissions at the levels we need

High-impact policy solutions

- Reduce the upfront cost of Electric Vehicles
- Expand access to EV charging infrastructure
- Promote policies that put a price on pollution



What if?

- Charging stations were as common as gas stations?
- All transit buses were electric?
- Rebates were increased to make electric vehicles more affordable?
- Vehicle miles traveled were reduced through equitable transit-oriented land development & investments in public transit?

Reducing transportation pollution is possible. New York just needs to pull the policy levers.

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TRANSPORTATION & CLIMATE INITIATIVE
Of the Northeast and Mid-Atlantic States

Reduce the price disparity between electric vehicles and internal-combustion engine vehicles

Expanding access to EV charging infrastructure

Pricing pollution

Reducing Vehicle Miles Travelled (or mode-shifting)

Increasing awareness of electric vehicles

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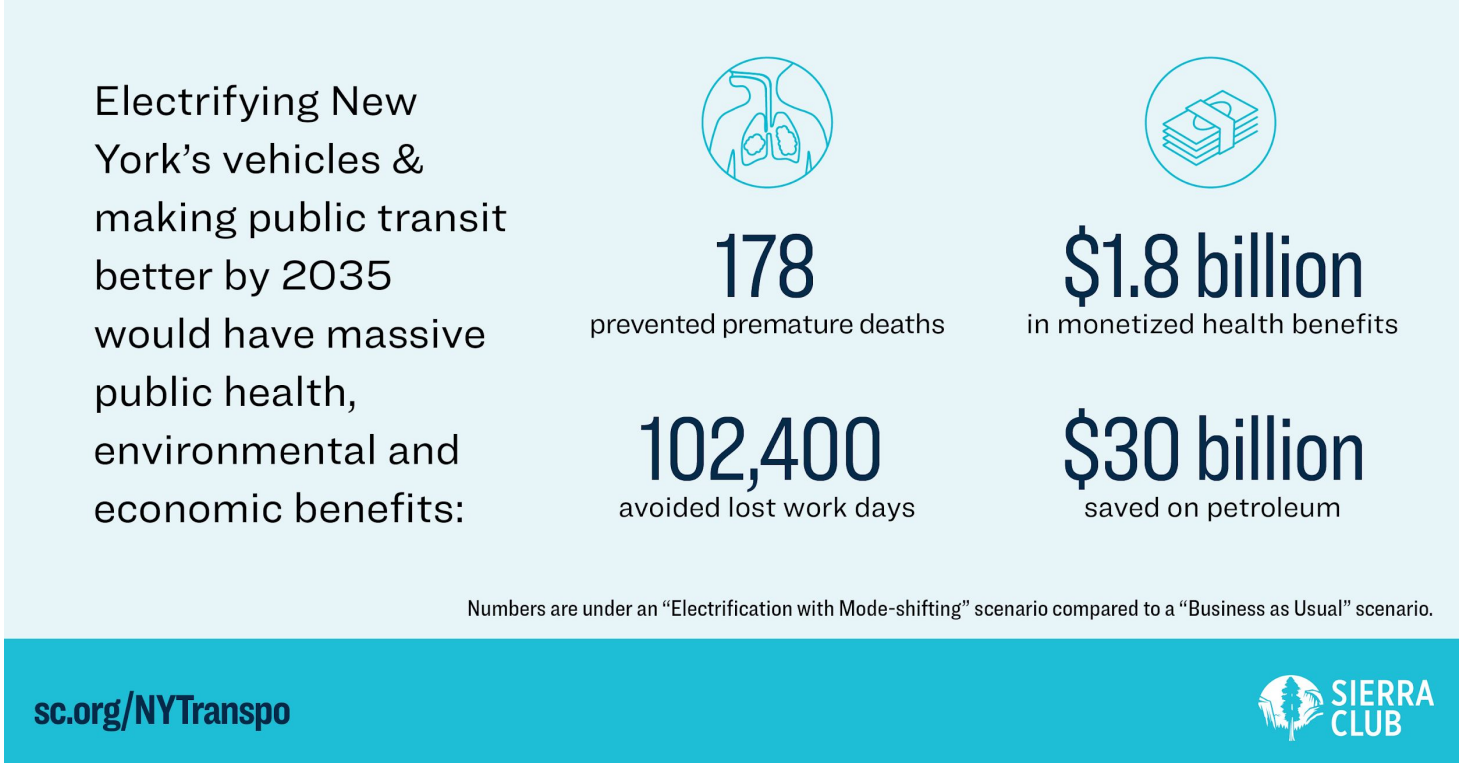
Reducing the price disparity between electric and fossil-fuel vehicles

	Business as Usual	Rapid electrification	Rapid electrification + Mode-shifting
Rebates	Current rebates: vehicles with all-electric ranges of >120 miles have a $2,000 rebate, while other vehicles (e.g., PHEVs) have progressively lower rebates	(1) Increases the $2,000 rebate to $5,000 in 2020 and (2) reduces the relative cost of EVs as compared to ICEs by an additional $500 per year in 2025 that ramps up to $3,000 in 2030	(1) Increases the $2,000 rebate to $3,800 in 2020 and (2) reduces the relative cost of EVs as compared to ICEs by an additional $500 per year in 2025 that ramps up to $3,000 in 2030

Providing transportation choices	Discouraging unsustainable motor vehicle travel
Mixed-use and transit-oriented zoning	**Congestion pricing and VMT fees**
Public and active transportation infrastructure	**Road diets**
Maintaining fare affordability	**Reducing parking requirements**



Making this shift will have significant benefits

Get Involved:

Sign our petition calling on Governor Cuomo to commit to 55% reductions from motor vehicles by 2035!

https://sc.org/2meRQbX

Check out our report and advocate for changes in your community and at the state level!

https://www.sierraclub.org/new-york-transportation-report-shows-need-reduce-transportation-emissions-55-2035

Thank you!

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