

Economic Implications of the Climate Provisions in the Inflation Reduction Act

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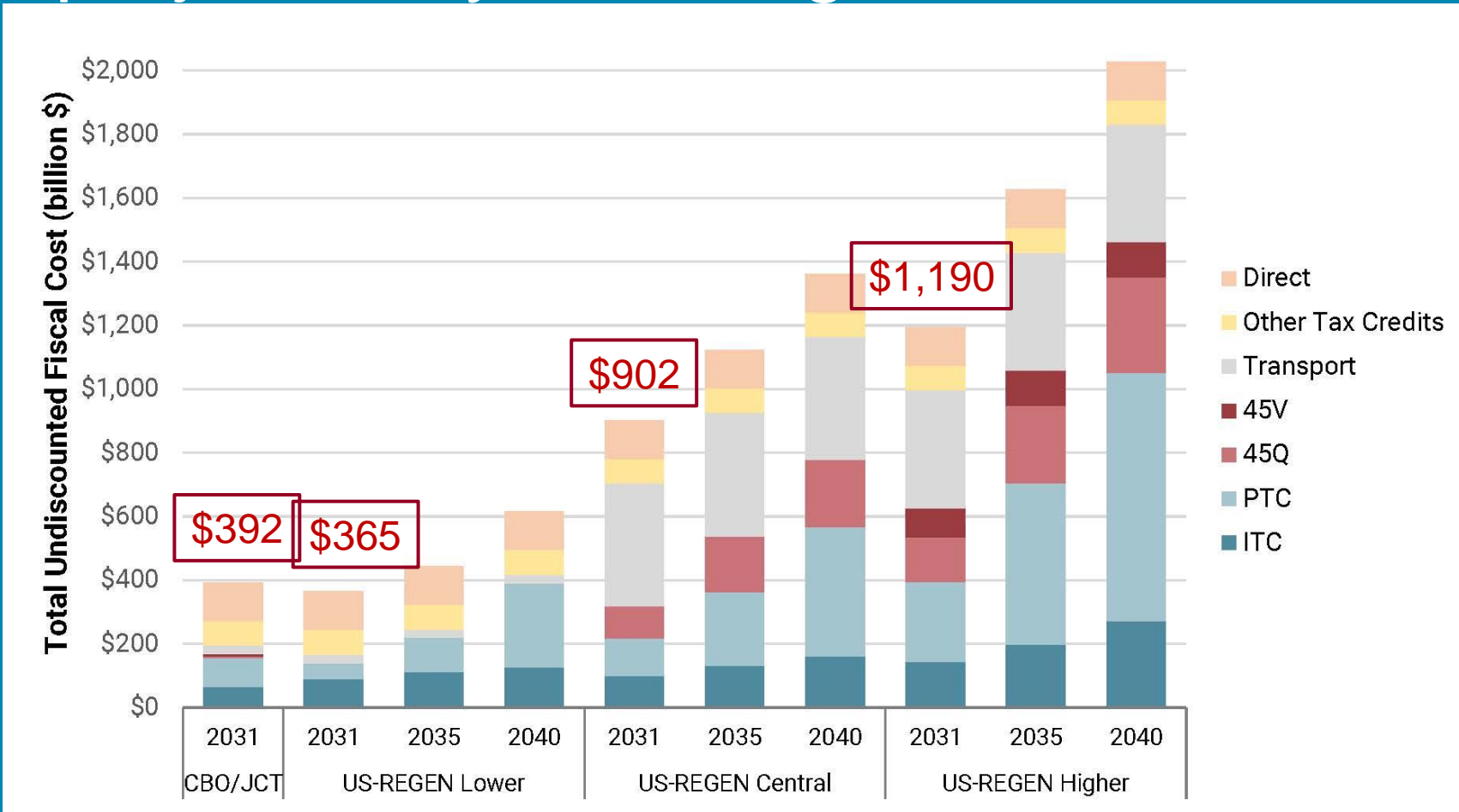
HARVARD Kennedy School

5 points in 6 pictures

Impacts on:

- Fiscal expenditures
- Emissions
- Efficiency
- EV adoption
- Macroeconomy

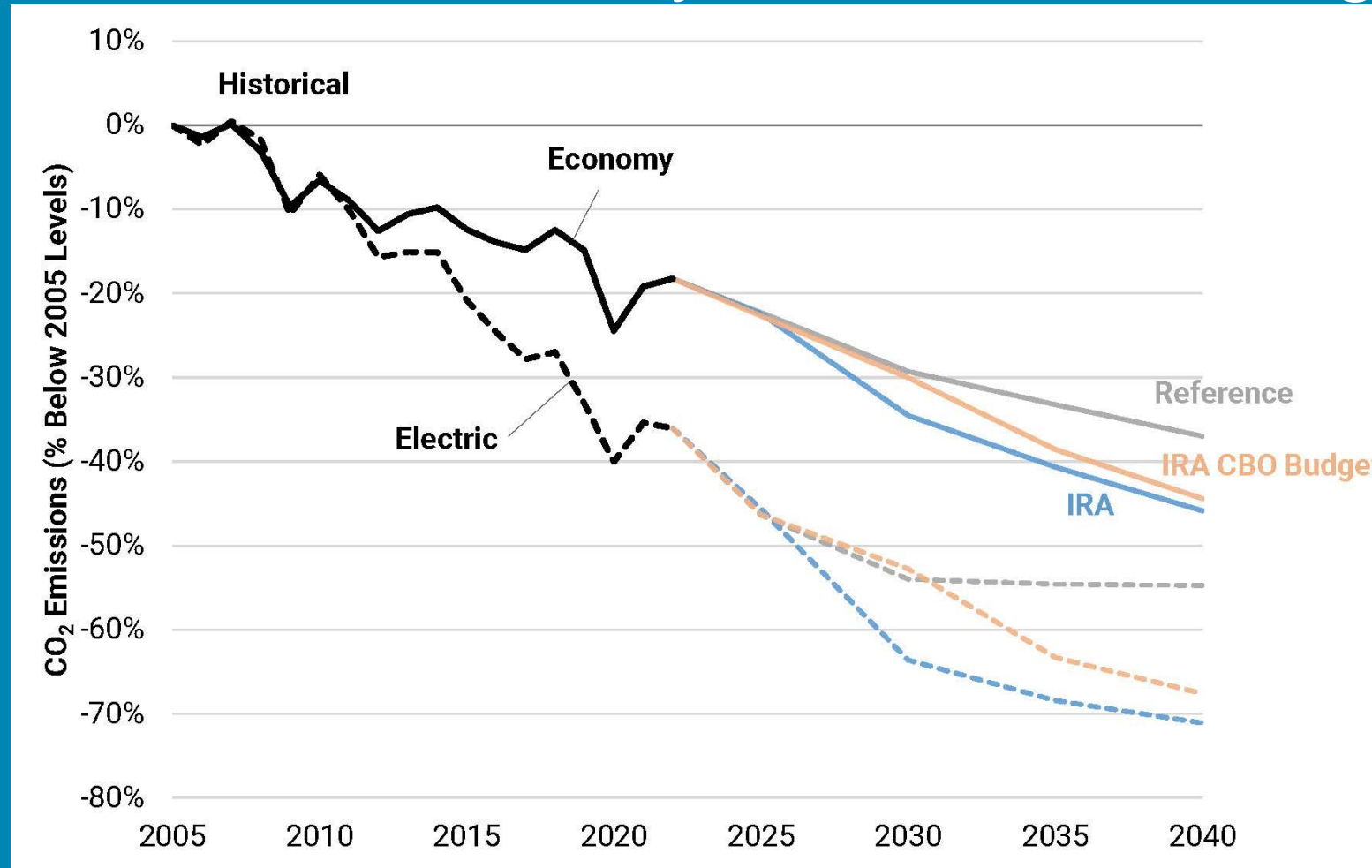
1. Fiscal costs are uncertain and could be higher than projected by the US government



Key Differences between US-REGEN and CBO

	CBO/JCT	US-REGEN	Difference
EV Credits	\$14 B	\$387 B	\$373 B
Carbon Capture and Sequestration (45Q)	3	100	97
PTC/ITC	173	218	45
Subtotal (3 items)	189	704	515
TOTAL (all climate)	\$392 B	\$902 B	\$510 B

2. Projected emissions will be lower under IRA, but more reductions necessary to achieve U.S. goals



3. IRA investments are highly cost-effective, but more expensive than carbon pricing

Metric (units)	2021	IRA Scenario		Carbon Tax		Difference (p.p.)	
		2030	2035	2030	2035	2030	2035
Generation Share (%)							
<i>Coal</i>	22%	11%	8%	7%	4%	-4%	-5%
<i>Coal CCS</i>	0%	3%	3%	0%	0%	-3%	-3%
<i>Gas</i>	39%	20%	18%	35%	34%	15%	17%
<i>Gas CCS</i>	0%	0%	0%	0%	0%	0%	0%
<i>Other</i>	2%	9%	11%	7%	8%	-2%	-3%
<i>Nuclear</i>	19%	17%	14%	17%	16%	0%	2%
<i>Hydro</i>	6%	6%	6%	6%	6%	0%	0%
<i>Wind and Solar</i>	13%	33%	41%	28%	32%	-6%	-9%
CO₂ (% Drop from 2005)	35%	64%	68%	64%	68%	0%	0%
Generation Price (\$/MWh)	\$64	\$56	\$52	\$65	\$62	16%	20%
Abatement Cost (\$/t-CO₂)	N/A	\$45-61	\$45-61	\$10	\$10	-85%	-82%

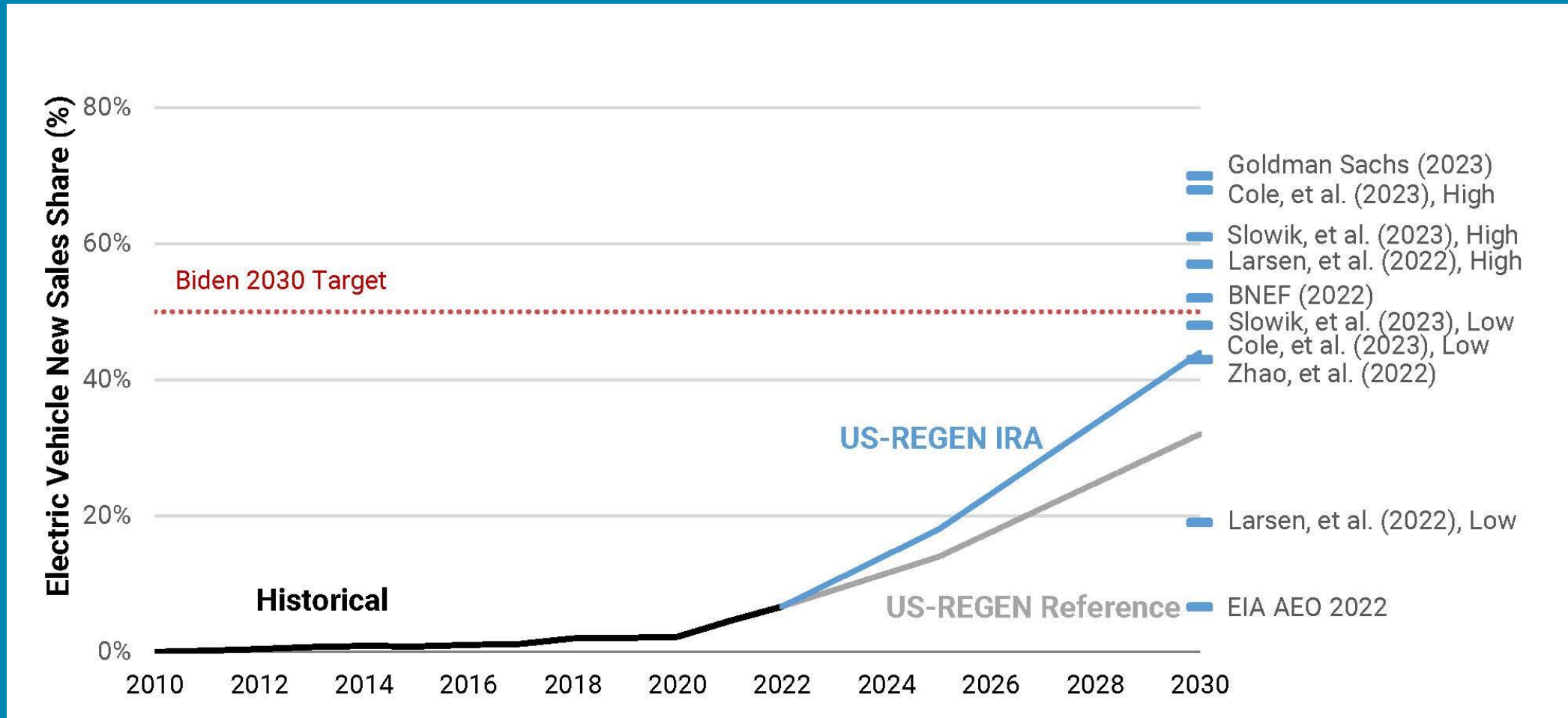
CO₂ price relative to IRA:

Less coal

More gas

Less wind and solar

4. Many EVs would have been purchased even without IRA



5. IRA will not have big impacts on the macroeconomy, but the macroeconomy could impact IRA

