ELI Summer School

July 13, 2023

Climate Change & Environmental Law

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Harvard Law School

HLS | ENVIRONMENTAL & ENERGY LAW PROGRAM

HLS Environmental & Energy Law Program

EELP provides innovative, rigorous legal analysis to:

- Facilitate the transition to a low-carbon, sustainable future
- Mitigate the disruptive effects of climate change
- Protect public health and welfare from environmental degradation
- Promote sustainability and climate adaptation
- Ensure environmental justice and a just transition for communities

EELP Resources:

Regulatory and EJ Trackers: https://eelp.law.harvard.edu/our-trackers/

Power Plant Regulatory Explainers: https://eelp.law.harvard.edu/power-plant-regulations/

CleanLaw Podcasts: https://eelp.law.harvard.edu/cleanlaw-our-podcast/

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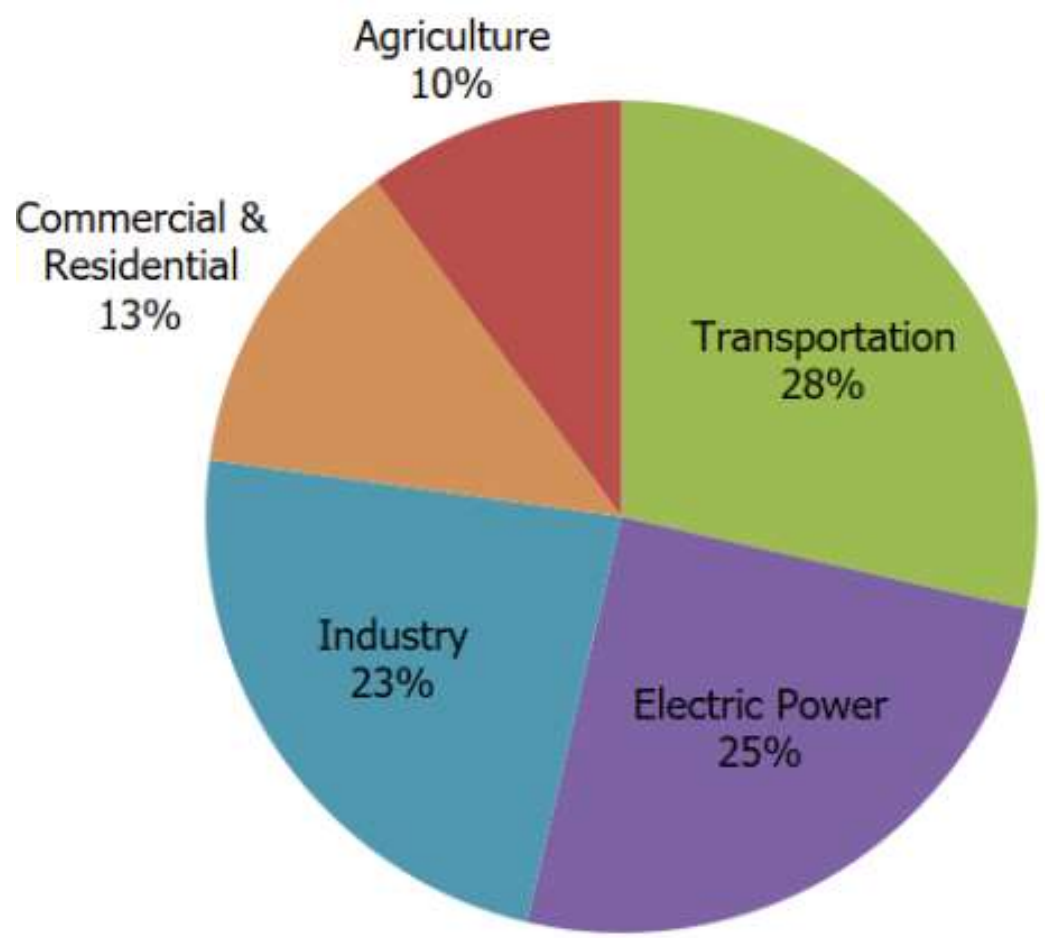
U.S. Greenhouse Gas Emission Sources (2021)



EPA

Adaptation: The process of adjustment to the actual or expected climate and its effects.

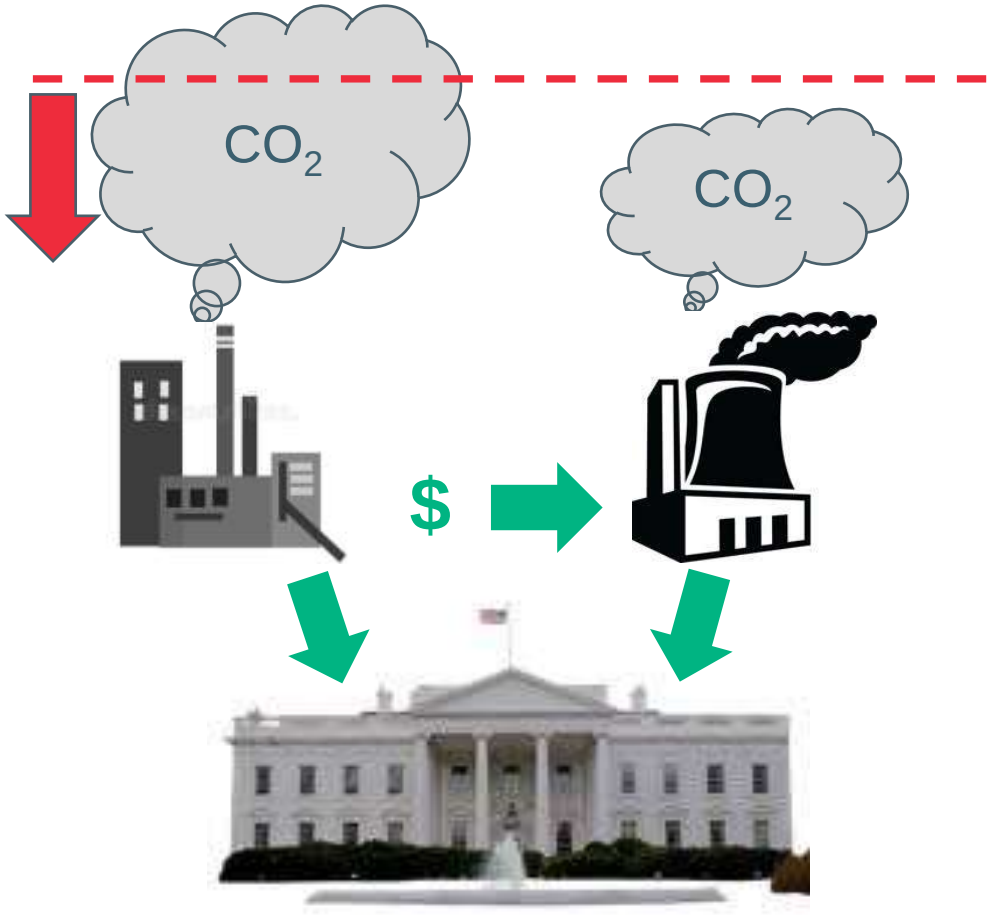
Mitigation: A human intervention to reduce emissions or enhance the sinks of greenhouse gases.

Resilience: The capacity of social, economic and environmental systems to cope with a hazardous event or trend or disturbance.

(IPCC Glossary)

US Government – Climate Policy Process

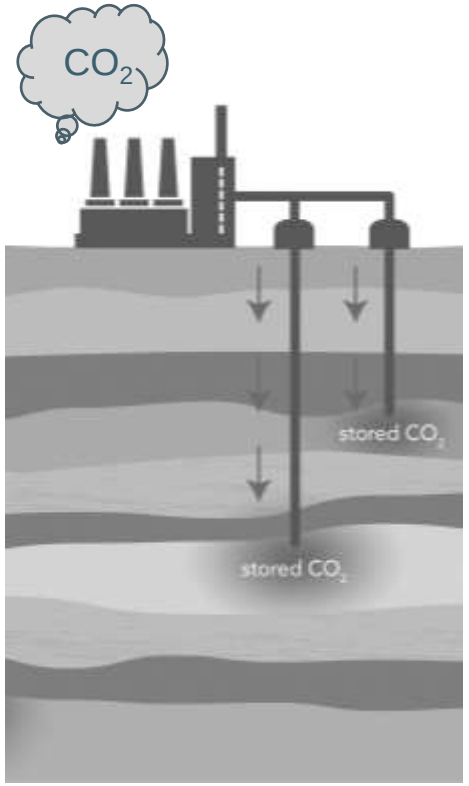
Tools – Carbon Pricing



Cap & Invest

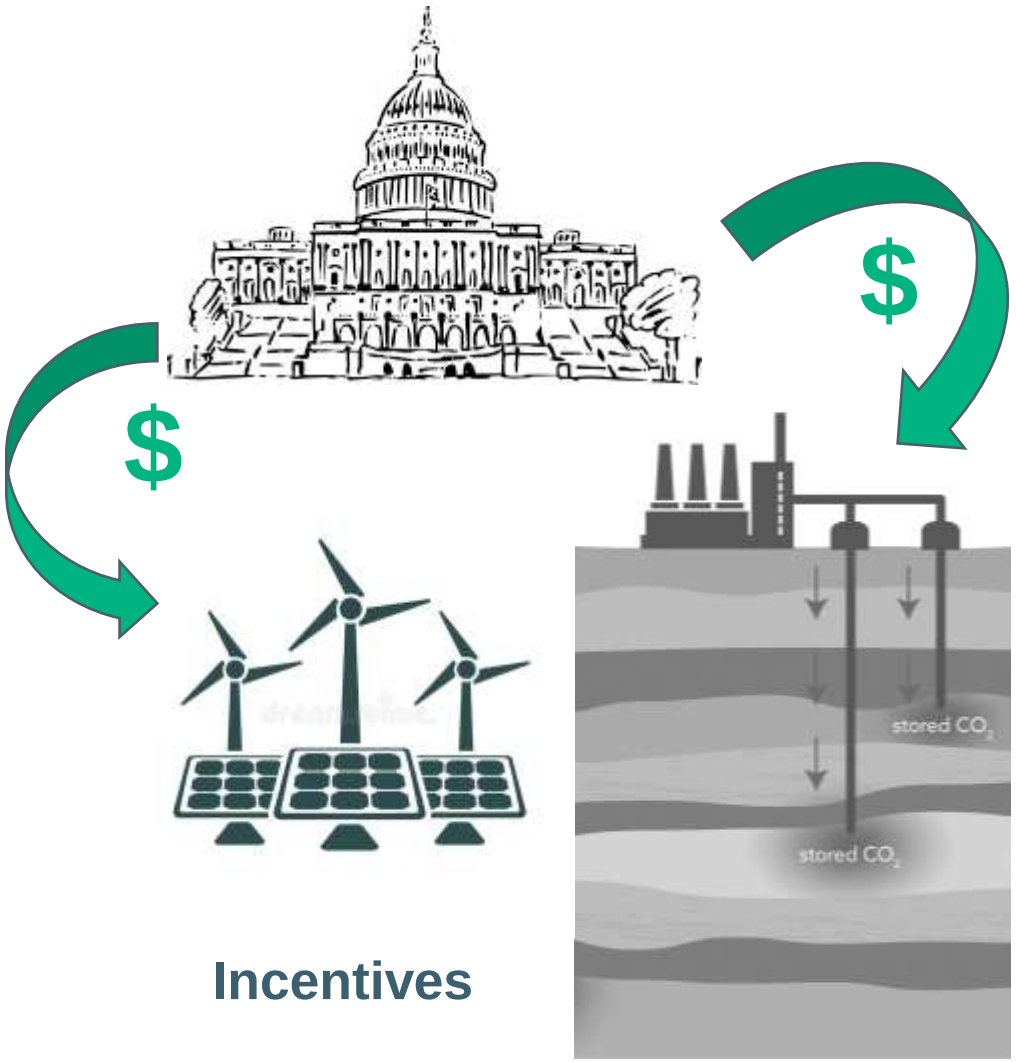
Carbon Tax

Emission rate (lb CO_2/MWh) based on 90% capture

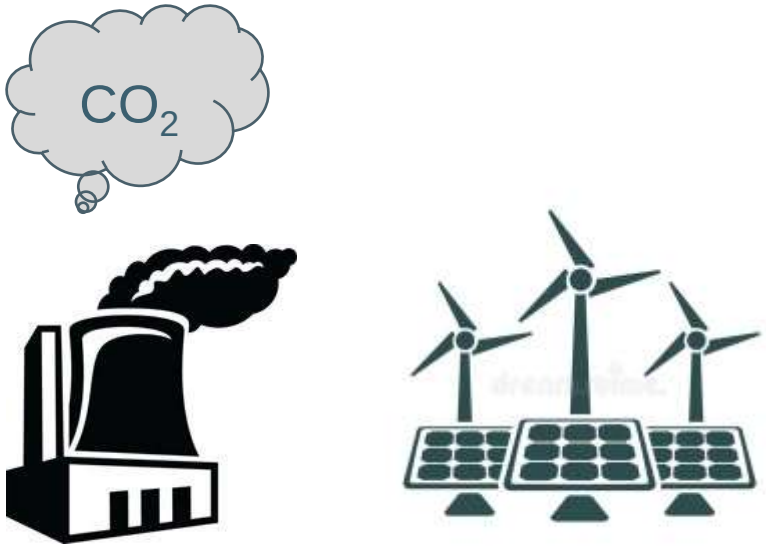


Command and Control

Tools - Incentives and Voluntary



Incentives

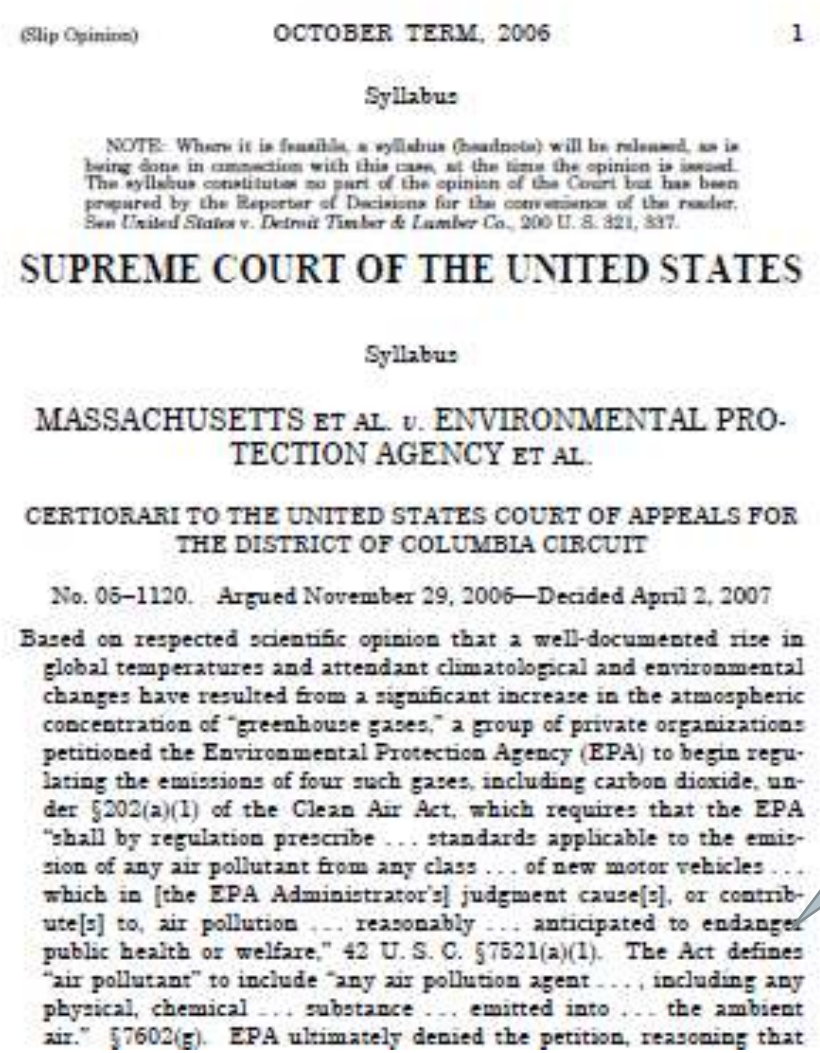


Voluntary Decarbonization

Massachusetts v. EPA

Justice Stevens wrote the opinion which Justices Kennedy, Souter, Ginsburg, and Breyer joined

Chief Justice **Roberts** filed a dissent which Justices Scalia, **Thomas**, and **Alito** joined



(Slip Opinion) OCTOBER TERM, 2006 1

Syllabus

NOTE: Where it is feasible, a syllabus (headnote) will be released, as is being done in connection with this case, at the time the opinion is issued. The syllabus constitutes no part of the opinion of the Court but has been prepared by the Reporter of Decisions for the convenience of the reader. See *United States* v. *Detroit Timber & Lumber Co.*, 200 U. S. 321, 337.

SUPREME COURT OF THE UNITED STATES

Syllabus

MASSACHUSETTS ET AL. *v.* ENVIRONMENTAL PROTECTION AGENCY ET AL.

CERTIORARI TO THE UNITED STATES COURT OF APPEALS FOR THE DISTRICT OF COLUMBIA CIRCUIT

No. 05–1120. Argued November 29, 2006—Decided April 2, 2007

Based on respected scientific opinion that a well-documented rise in global temperatures and attendant climatological and environmental changes have resulted from a significant increase in the atmospheric concentration of "greenhouse gases," a group of private organizations petitioned the Environmental Protection Agency (EPA) to begin regulating the emissions of four such gases, including carbon dioxide, under §202(a)(1) of the Clean Air Act, which requires that the EPA "shall by regulation prescribe . . . standards applicable to the emission of any air pollutant from any class . . . of new motor vehicles . . . which in [the EPA Administrator's] judgment cause[s], or contribute[s] to, air pollution . . . reasonably . . . anticipated to endanger public health or welfare," 42 U. S. C. §7521(a)(1). The Act defines "air pollutant" to include "any air pollution agent . . . , including any physical, chemical . . . substance . . . emitted into . . . the ambient air." §7602(g). EPA ultimately denied the petition, reasoning that

"Because greenhouse gases fit well within the Clean Air Act's capacious definition of "air pollutant" we hold that EPA has the statutory authority to regulate the emissions of such gases from new motor vehicles."

West Virginia v. EPA

Question: Whether Congress authorized EPA to set a standard that accounts for measures that reduce emissions from the electric system—including generation shifting and cap-and-trade programs—and whether EPA's standard limits measures that states may include in their compliance plans?

Decision: Court held that EPA lacked the authority to set an emissions cap for GHGs based on generation shifting

(Slip Opinion) OCTOBER TERM, 2021

Syllabus

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SUPREME COURT OF THE UNITED STATES

Syllabus

WEST VIRGINIA ET AL. *v.* ENVIRONMENTAL PROTECTION AGENCY ET AL.

CERTIORARI TO THE UNITED STATES COURT OF APPEALS FOR THE DISTRICT OF COLUMBIA CIRCUIT

No. 20–1530. Argued February 28, 2022—Decided June 30, 2022*

In 2015, the Environmental Protection Agency (EPA) promulgated the Clean Power Plan rule, which addressed carbon dioxide emissions from existing coal- and natural-gas-fired power plants. For authority, the Agency cited Section 111 of the Clean Air Act, which, although known as the *New* Source Performance Standards program, also authorizes regulation of certain pollutants from *existing* sources under Section 111(d). 42 U. S. C. §7411(d). Prior to the Clean Power Plan, EPA had used Section 111(d) only a handful of times since its enactment in 1970. Under that provision, although the States set the actual enforceable rules governing existing sources (such as power plants), EPA determines the emissions limit with which they will have to comply. The Agency derives that limit by determining the "best system of emission reduction . . . that has been adequately demonstrated," or the BSER, for the kind of existing source at issue. §7411(a)(1). The limit then reflects the amount of pollution reduction "achievable through the application of" that system. *Ibid.*

"Although the States set the actual rules governing existing power plants, **EPA itself still retains the primary regulatory role** in Section 111(d). The Agency, not the States, decides the amount of pollution reduction that must ultimately be achieved. It does so by again determining, as when setting the new source rules, "the best system of emission reduction . . . that has been adequately demonstrated for [existing covered] facilities."…The **States then submit plans containing the emissions restrictions that they intend to adopt and enforce in order not to exceed the permissible level of pollution established by EPA**.

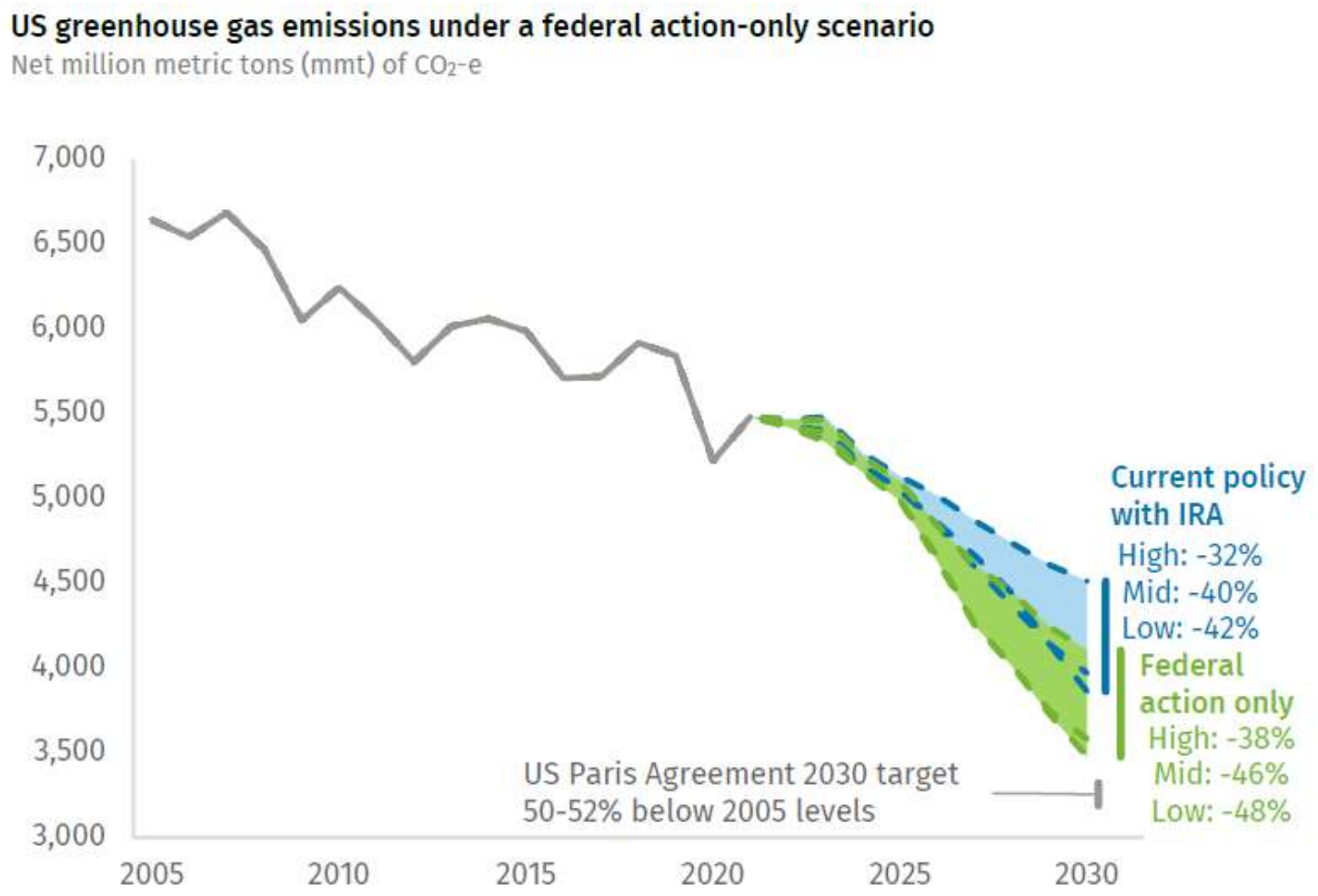
Inflation Reduction Act

- Congress passed the Inflation Reduction Act last summer
- Spurs investment in clean energy through tax incentives, grants, and other funding mechanisms
- Projected to reduce GHG emissions by about **40% below 2005 levels by 2030**
- Changes the baseline for EPA rules as it brings down the cost of clean technologies

US Government – Climate Policy Process

Inflation Reduction Act - Regulatory Driver

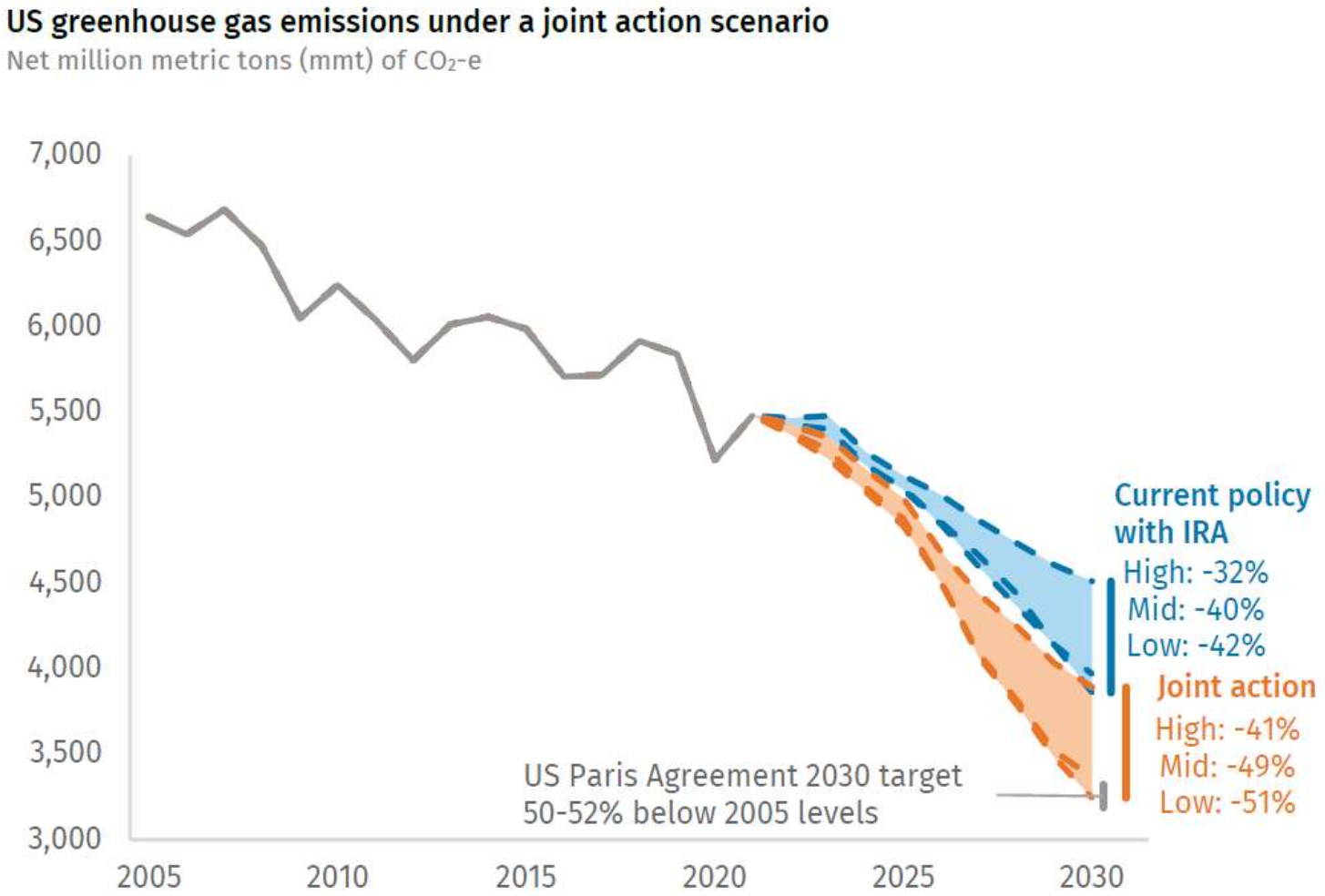
US Progress



Source: Rhodium Group. The high, mid, low ranges reflect uncertainty around future fossil fuel prices, economic growth, and clean energy technology costs.

https://rhg.com/wp-content/uploads/2023/03/Pathways-to-Paris-Post-IRA-Policy-Action-to-Drive-US-Decarbonization.pdf

US Progress



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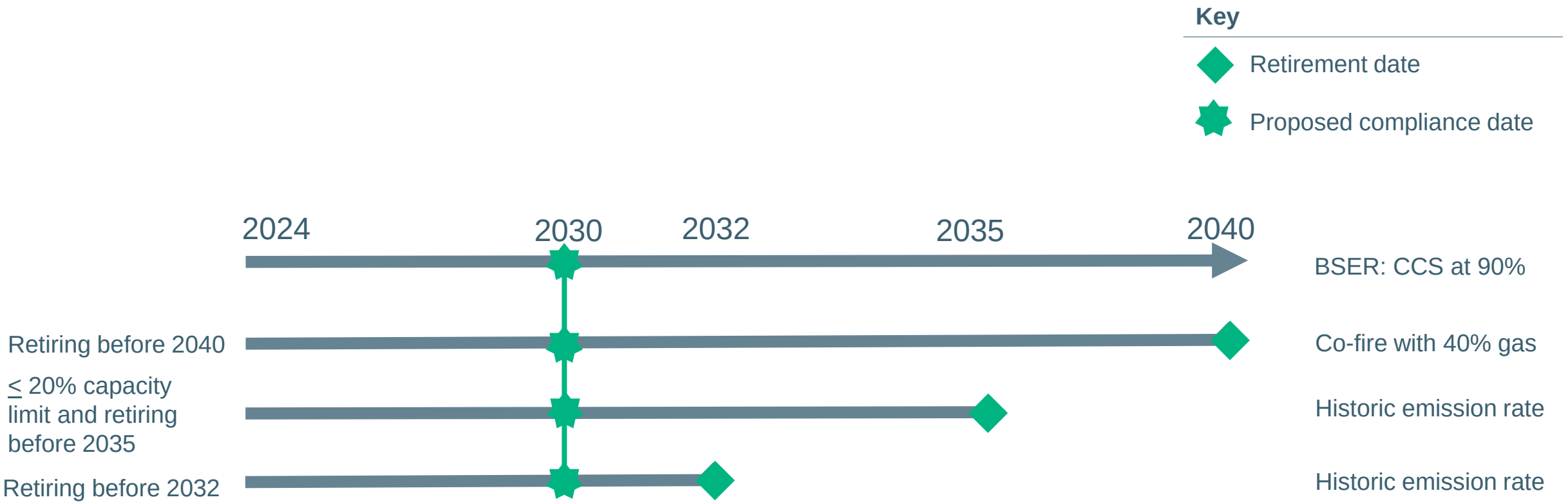
Appendix

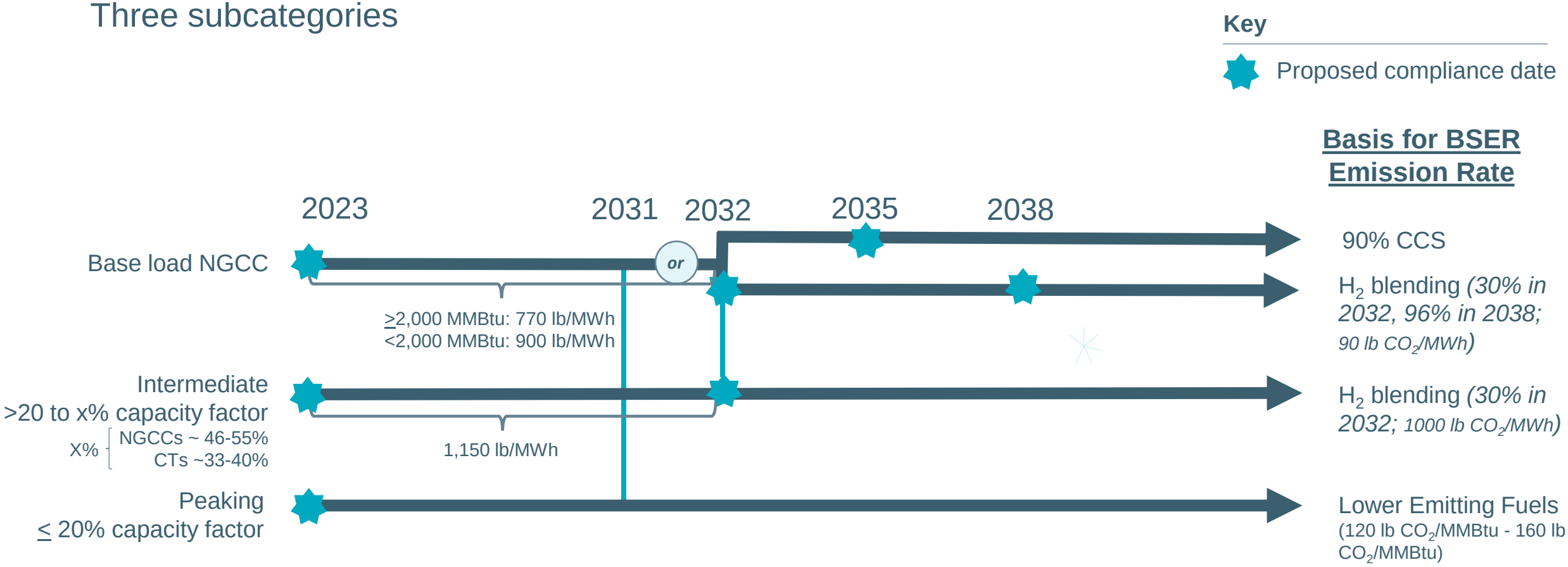
Proposed Existing Coal Standards – Timing and Subcategories

BSER based on CCS with Three Alternative Pathways



Proposed New Gas Standards – Timing and Subcategories

Three subcategories



Proposed Existing Gas Standards – Timing and Subcategories

Standard proposed to apply only to NGCC baseload units

Key

Proposed compliance date