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19-SB-100 Develop 100% Clean Energy by 2030

Replace NG plants with Battery Energy Solar Storage facilities.
Decrease subsidies and royalty relief for fossil fuel projects. Stop issuing new well permits (in collaboration with CalGEM).
Accelerate development of the 14 Western states smart grid.
Offshore wind provides electricity at a lower cost than any other source. Maximize build-out along all areas of our coastline that have the highest velocity winds.
Funding sources: oil severance tax (CA is the only state without such), increase floor auction price of allowances for cap&trade to Social Cost of Carbon (this is between $100 - $200/MT per latest research), increase registration fees for combustion vehicles by at least 10%/year, increase gas guzzler tax annually for sale of new and used combustion vehicles, increase taxes for renting or leasing combustion vehicles, collect an emission fee via ticketing for scheduled airline travel, increase diesel and gasoline taxes annually, etc.

Once again, it turns out that itâ€™s cheaper to save the climate than destroy it.

Important new modeling from the University of California at Berkeley and GridLab, led by Energy Innovation, reports the United States can reliably hit 90 percent clean energy by 2035, without increasing customer bills from todayâ€™s levels.

Plummeting costs for wind, solar, and energy storage are the driving force behind this trend. Actual wind and solar costs for 2017-2018 were lower than most modelsâ€™ projected costs for 2030-2035, while battery prices have fallen 85 percent since 2010. Hitting 90 percent clean energy would create a sustained economic boost, injecting $1.7 trillion of private investment into the economy over 15 years, supporting 530,000 new net jobs per year, and cutting wholesale power prices 10 percent.

Cleaning up the U.S. grid would also reduce economy-wide carbon emissions 27 percent, avoid $1.2 trillion in environmental and health costs, and prevent up to 85,000 premature deaths associated with power plant emissions. These are compelling results: They are backed up by careful research.
Energy Innovation developed a dynamic online data explorer to support the research that allows anyone to see how the gridâ€™s generation mix and cumulative clean energy additions change over time in each of the countryâ€™s regional grid areas.

The clean energy transition need not mean leaving utilities with excessive stranded assets. A 2035 target year provides enough time to retire all existing coal generation and reduce natural gas consumption for power by 70 percent, leaving existing gas generation online but largely idle, used only for grid balancing at the highest demand moments. Of course, building more gas power plants would instead create huge

stranded costs.

Unfortunately, Americaâ€™s current electricity policy framework is not on track to deliver this economic opportunity. Energy Innovation released a companion set of policy recommendations with the 2035 modeling, laying out a series of technology-neutral actions to cost-effectively and equitably support the rapid transition to a clean electricity future.
Success does not depend on all adopting all of these policies at once. Most progress can be made with a federal clean energy standard that builds on and complements state policy leadership, starting with a 55 percent federal clean target by 2025, ramping up to 90 percent by 2035, and ultimately hitting 100 percent by 2045.

Federal, state, and power market policymakers should also work to extend clean energy tax credits, create a just transition for coal-dependent communities, help utilities refinance retired coal equity and debt; streamline renewables siting and transmission planning, invest in R&D to make future technologies a reality; and reform power markets and utility business models. That seems like a long list, but it is all aimed at delivering vast simultaneous economic and environmental benefits.

Building a 90 percent clean electricity system is a no-regrets opportunity for economic recovery and would be a major decarbonization win, and it would put us well on the way to a 100 percent clean energy future.

I encourage you to check out these exciting new results, and I hope they help your efforts to secure a safe climate future.

Cheers,

Hal
Plunging Renewable Energy Prices Mean U.S. Can Hit 90% Clean Energy By 2035 - At No Extra Cost
Forbes
By Silvio Marcacci
New research shows plunging renewable energy prices mean wind, solar, and energy storage can provide 90% of U.S. electricity by 2035 - at no extra cost.
Coronavirus To Cut U.S. Emissions 11% In 2020, But It's No Climate Victory
Forbes
By Megan Mahajan
New modeling shows COVID-19 will cut U.S. emissions up to 11% in 2020, but rebound to pre-COVID levels by 2025 without affecting long-term emissions unless the government embraces a green recovery.

www.2035report.com

Let me know if you wish further information and citations.