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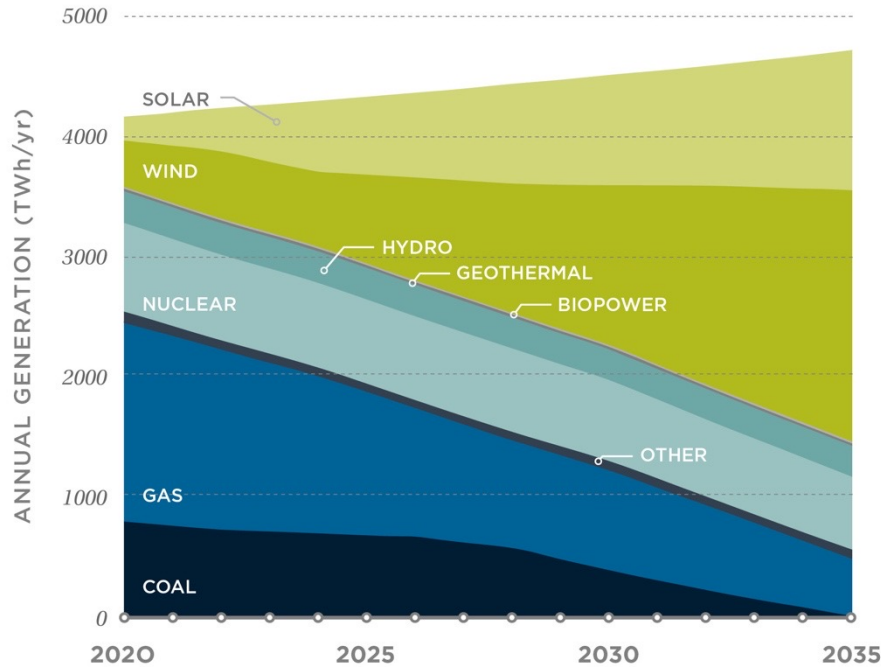
THE REPORT

PLUMMETING SOLAR, WIND,
AND BATTERY COSTS
CAN ACCELERATE OUR
CLEAN ELECTRICITY FUTURE

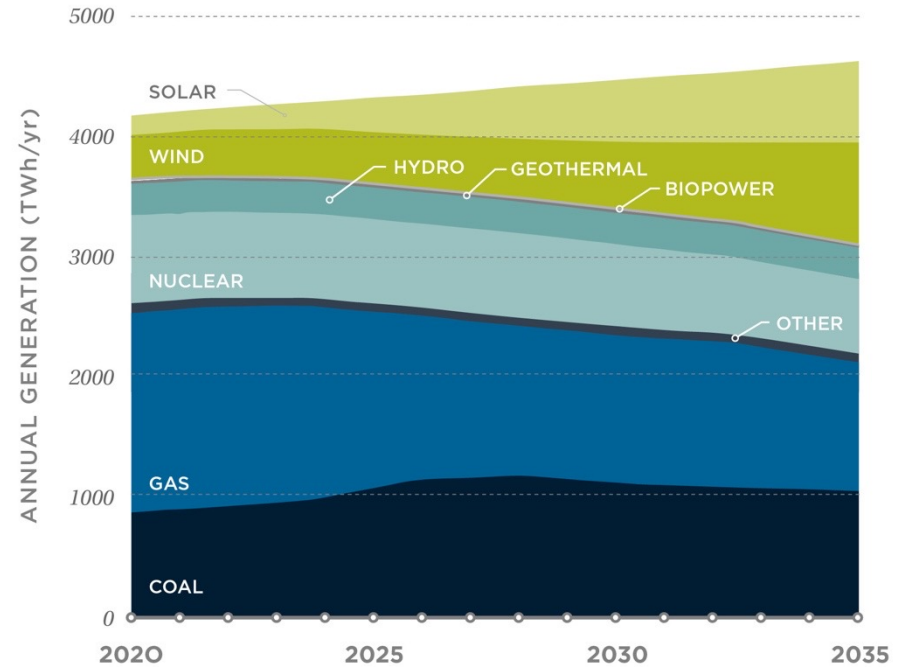
Amol Phadke, Ph.D.
Staff Scientist
Lawrence Berkeley National Laboratory

STRONG POLICIES REQUIRED FOR A 90% CLEAN GRID BY 2035

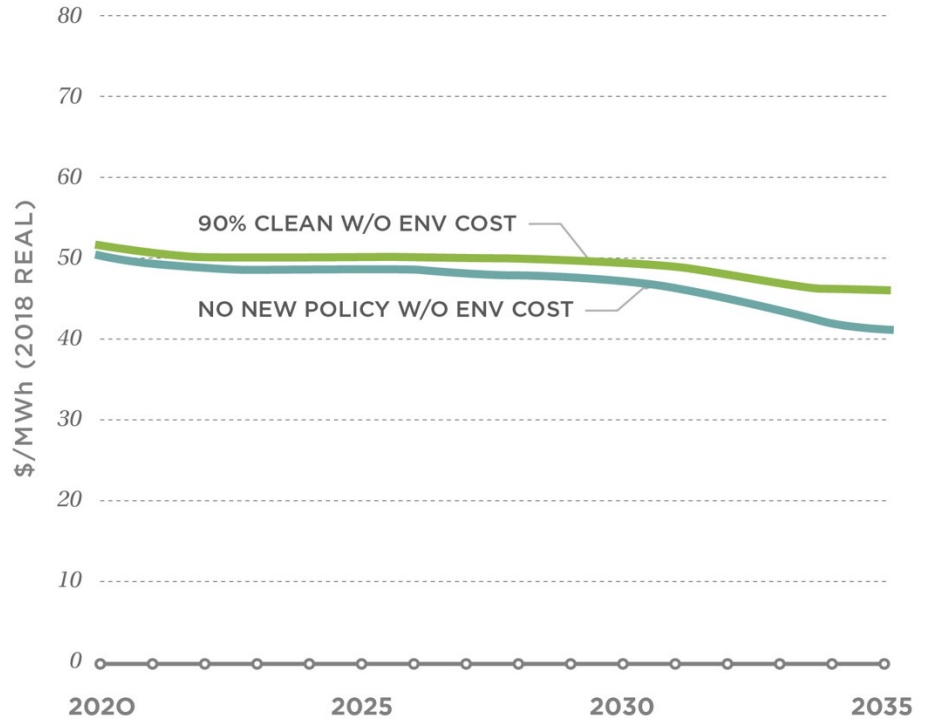
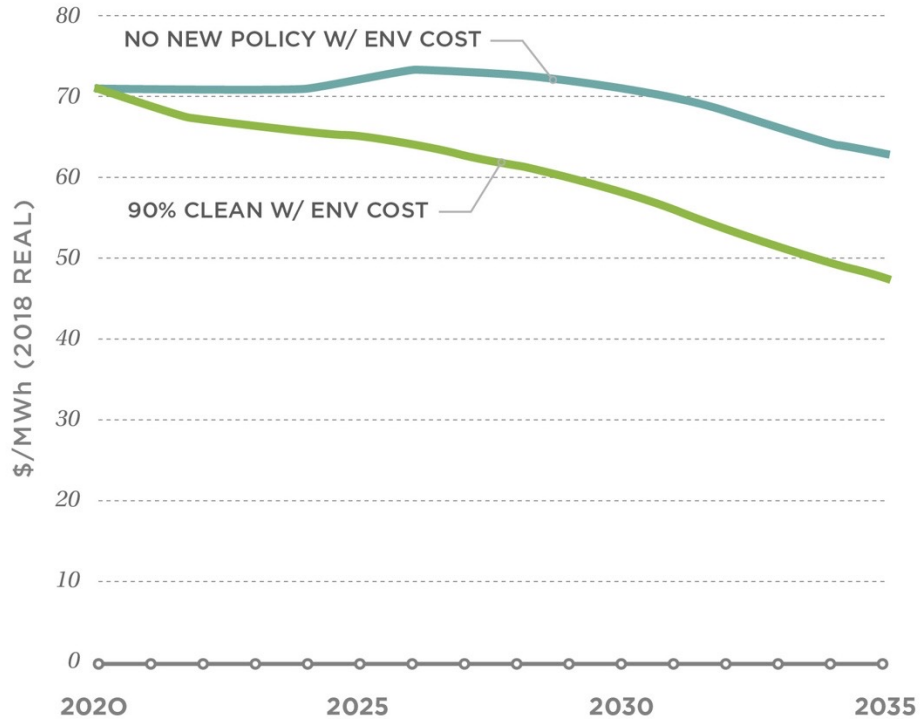
ANNUAL GENERATION | **90% CLEAN**



ANNUAL GENERATION | **NO NEW POLICY**

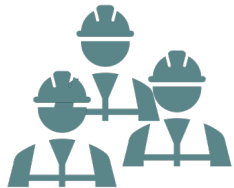
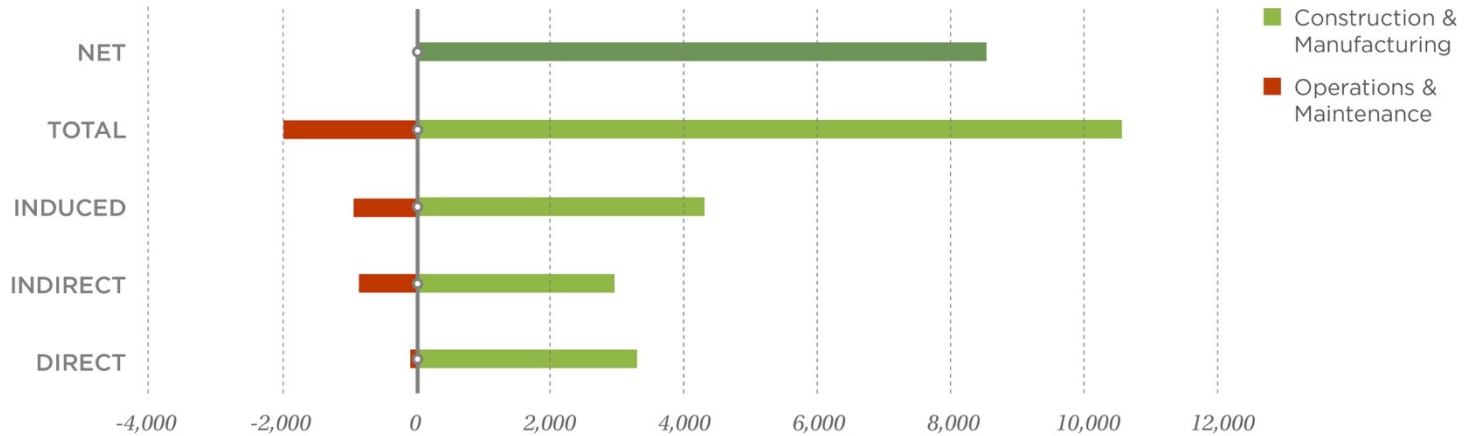


ELECTRICITY COSTS LOWER THAN TODAY



SIGNIFICANTLY INCREASES ENERGY SECTOR EMPLOYMENT

CUMULATIVE JOB YEARS ('000), 90% CLEAN COMPARED TO NO NEW POLICY



***Supports 500,000 more jobs
each year through 2035 than business as usual***

CORE PARTNERS

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2035 REPORT 2.0

Plummeting Costs and Dramatic improvements in Batteries Can Accelerate Our Clean Transportation Future



RAPID TRANSPORTATION ELECTRIFICATION WITH A CLEAN POWER GRID

Research question: given recent rapid declines in battery costs, what are impacts of rapid transportation sector electrification on consumers, electric infrastructure, employment, emissions, and public health?



Model 100% electric sales of passenger cars and trucks by 2030



Model 100% electric sales of medium- and heavy-duty vehicles by 2035

CONSUMERS SAVE \$2.7T BY 2050; OPPORTUNITY COST OF A 5-YR DELAY IS \$400B

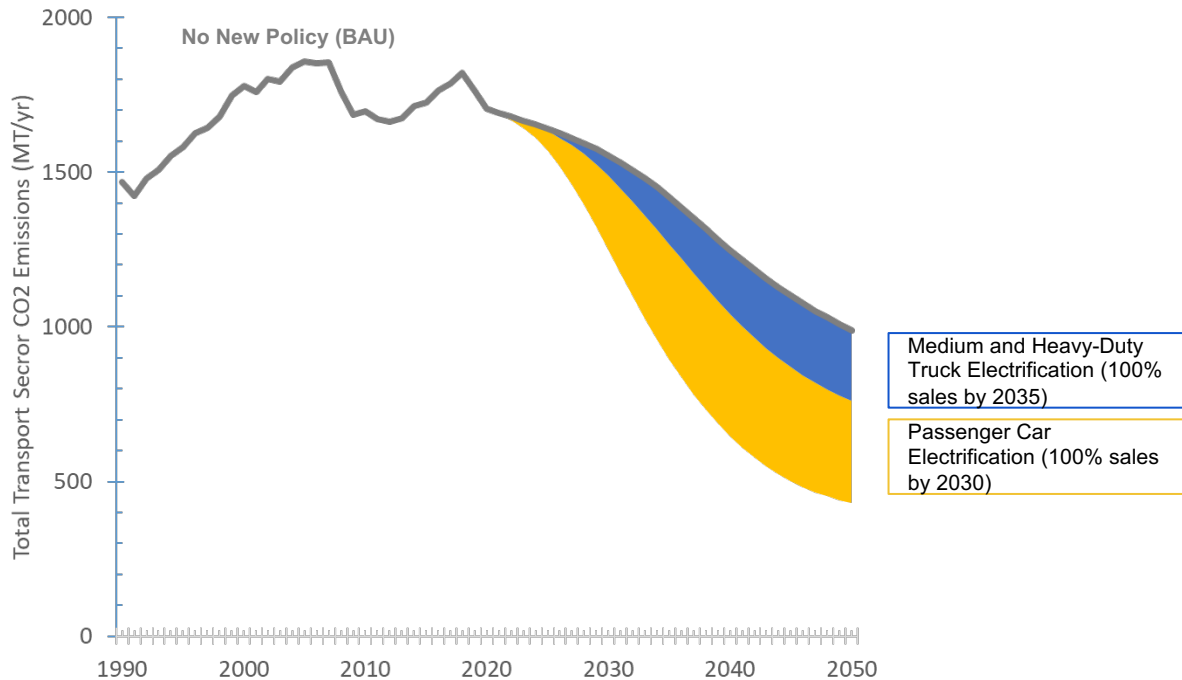
Consumers save ~\$2.7 Trillion between 2020 and 2050.
(~\$100-200 Billion per year over 30 years)

This translates to average household savings of \$1,000 every year.

Including the environmental benefits, total savings are in excess of \$4 Trillion.

Under a less ambitious EV target (5-year delay in the passenger vehicle target), over \$400 Billion of consumer savings are deferred.

ELIMINATES EMISSIONS FROM CARS AND TRUCKS BY 2050



**Ground transportation
greenhouse gas
emissions fall:**

60% by 2035

93% by 2050

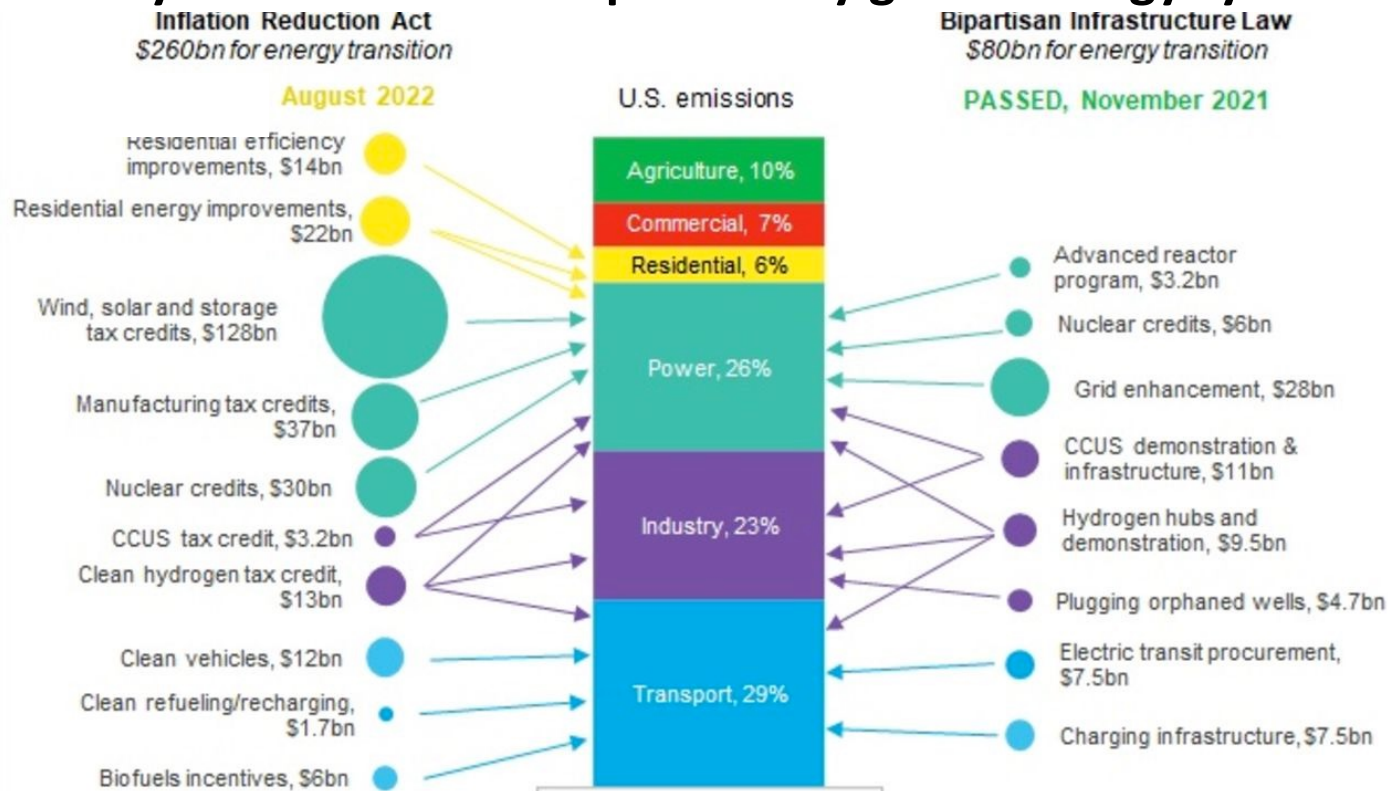
**Ground transportation
pollution-related
premature deaths fall:**

56% by 2035

96% by 2050

150,000 total deaths
avoided by 2050

Inflation Reduction Act (IRA) + Bipartisan Infrastructure Law (BIL): Significant, stackable, and long lasting (until ~2045) incentives that will likely transform US and potentially global energy systems



Source: BNEF 2022

ENERGY
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RICHARD AND RHODA
GOLDMAN SCHOOL
OF
PUBLIC POLICY
UNIVERSITY OF CALIFORNIA BERKELEY

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