

Residential Energy Storage Solution to Address Renewable Energy Shortcomings
(Technical Report)

Opposition to Renewable Energy in the U.S.
(STS Research Paper)

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by

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Preface

To mitigate global warming and prevent the exhaustion of fossil fuels, renewable energy must be more widely implemented.

Residential electrical energy storage battery technology must be improved to prevent rolling blackouts and decrease reliance on the grid. More efficient and affordable energy storage can compensate for the intermittency of power from renewables. Improvements to energy storage techniques are necessary to decrease costs and increase implementation. The research team investigated opportunities for such improvements. Results show that a battery with a carbon-coated lithium-iron-phosphate cathode and a sulfur-doped porous carbon anode yields the most efficient and sustainable means of energy storage for residential and small community use.

Opponents of renewable energy typically have a financial stake in dependence on fossil fuels. Through public relations techniques, utility trade associations, industry groups, and front organizations for fossil fuel enterprises often exaggerate the economic costs of renewables. Understanding how opponents of renewable energy advance their agenda is critical to the success of efforts to promote renewable energy.