Pathways to a Low Carbon Future

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Agenda

- Climate Solutions Overview
- Strategic Innovation Overview
- Question and Answer





Climate Solutions Mission

Accelerate *practical, profitable* solutions to global warming by:

- ✓ Galvanizing leadership
- ✓ Growing investment
- ✓ Bridging divides

GOAL: Make the Northwest a national and world leader in the clean energy economy







Policy Leadership

- Oregon Legislature
- Washington Legislature
- Northwest Delegation

Movement Building

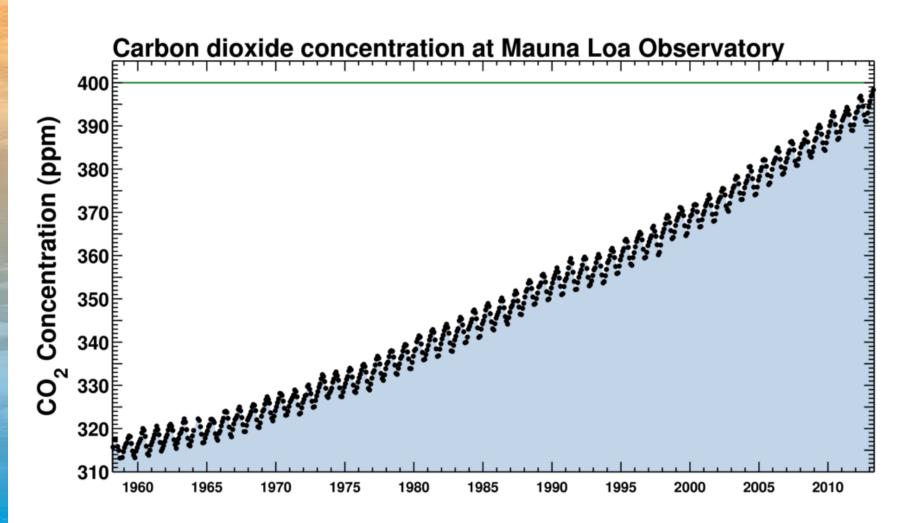
- Business Partnerships
- Power Past Coal
- Stand Up to Oil
- Alliance for Clean Energy and Jobs
- Renew Oregon

Strategic Innovation

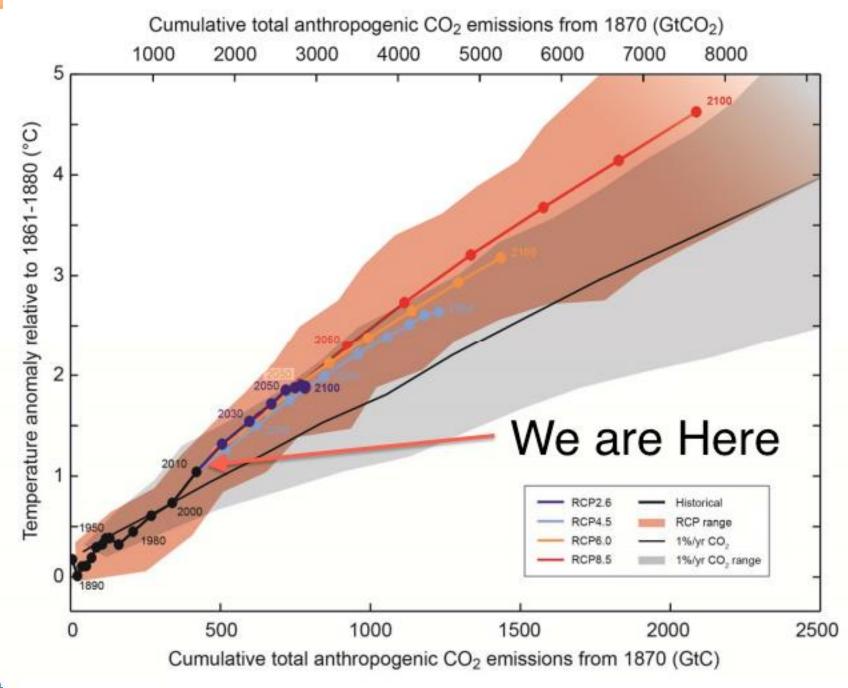
- Pathways Project
- New Energy Cities
- Sustainable Advanced Fuels



A Grim Milestone

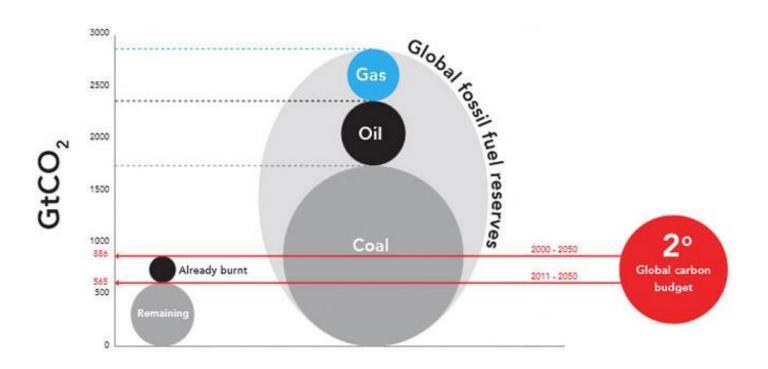








Unburnable Carbon





Fossil Fuel Industry Thwarts Progress



Home > What We Do > Stop Global Warming > PolluterWatch > Koch Industries: Secretly Funding the Climate Denial Machine

Koch Industries: Secretly Funding the Climate Denial Machine

The Koch Brothers have sent at least \$79,048,951 to groups denying climate change science since 1997.

Greenpeace uses 1997 as a benchmark year due to increased coordinated backlash against global climate negotiations leading to the Kyoto Protocol of 1998. We define climate change denial as "anyone who is obstructing, delaying or trying to derail policy steps that are in line with the scientific consensus that says we need to take rapid steps to decarbonize the economy @."

PolluterWatch

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Secret funding helped build vast network of climate denial thinktanks

Anonymous billionaires donated \$120m to more than 100 anti-climate groups working to discredit climate change science

How Donors Trust distributed millions to anti-climate groups



Climate sceptic groups are mobilising against Obama's efforts to act on climate change in his second term. Photograph: Justin Sullivan/Getty Images

GREENPEACE

Greenpeace USA

But It's Not Working As Well Now







U.S. Engaged











Crossroads Moment

- Transition in next five years or "lose forever"
 the chance to avoid dangerous climate change
- The make or break issue: Energy infrastructure decisions in growing economies





What Do We Do?

- Stop Making it Worse
- Get Serious about GHG Reduction-Fast
- Pass Policies to Send Right Market Signals

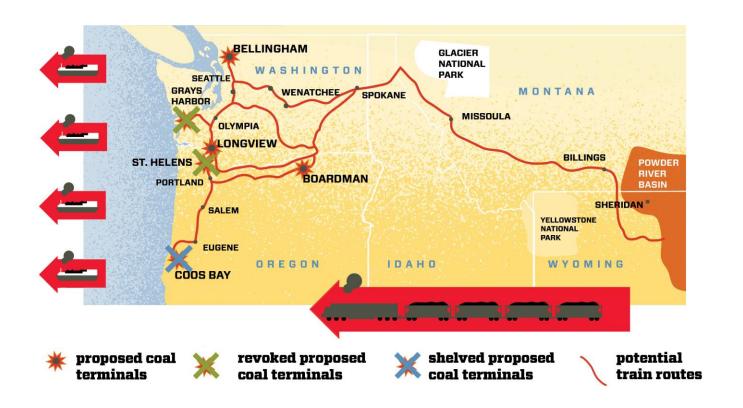








Stop Export and Infrastructure





Pathways Project



 Demonstrate climate solutions to increase public confidence that the clean energy economy is possible, practical, economically attractive, and gaining momentum.

 Articulate the Northwest roadmap to transition off of coal and to one-half oil by 2030



Getting Off Coal

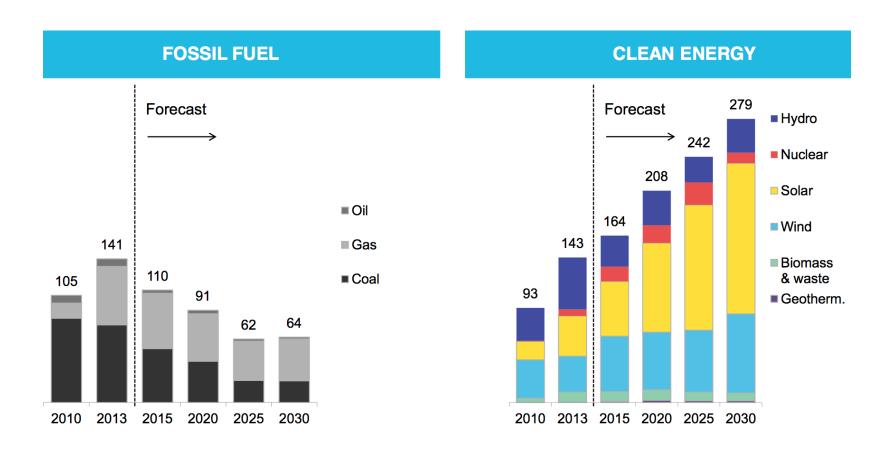






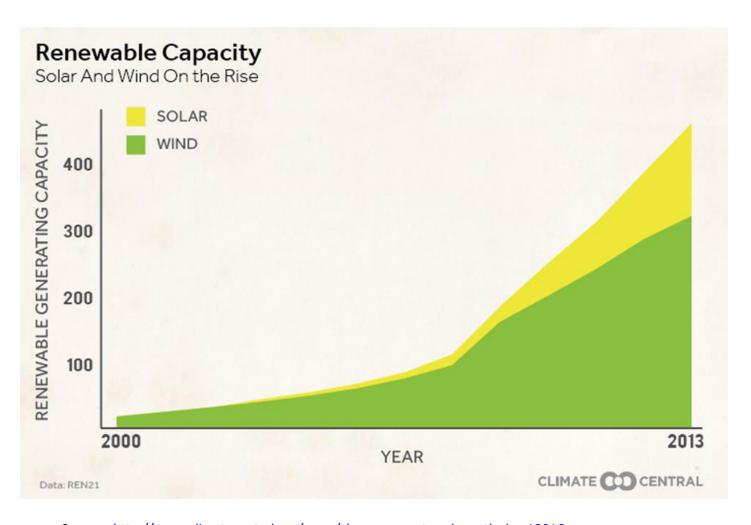


Fossil Fuels Losing the Race





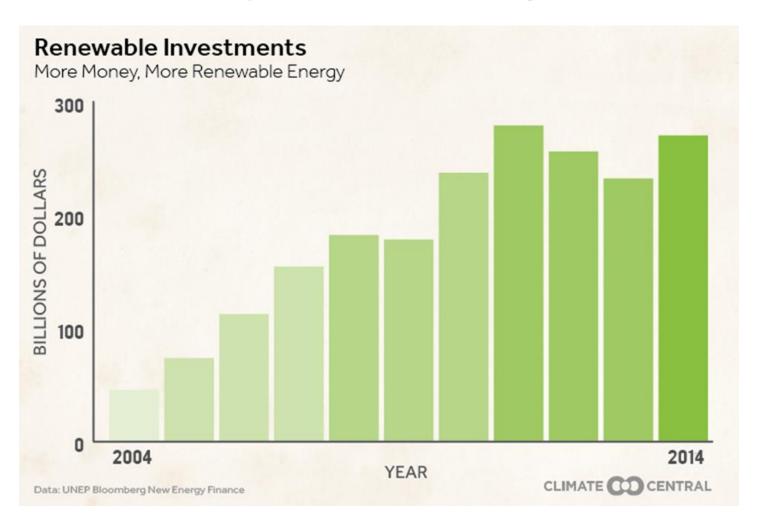
Explosive Growth of Wind & Solar



 $Source:.\ \underline{http://www.climatecentral.org/news/clean-energy-trends-earth-day-18916}$



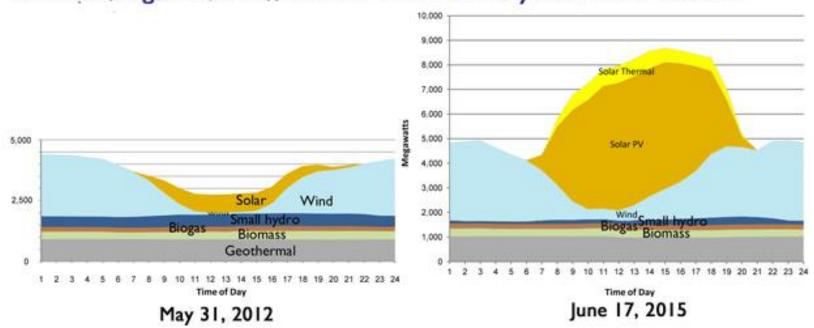
Less Money Purchasing More RE



Source: http://www.climatecentral.org/news/clean-energy-trends-earth-day-18916



What a difference three years can make: Renewable generation in California on two days of similar weather



Source:. http://www.climatecentral.org/news/clean-energy-trends-earth-day-18916



Getting Off Oil









Sustainable Advanced Fuels

- Scaling low-carbon, sustainable and cost-effective alternatives to petroleum in transportation sector:
 - ✓ Passing policies to scale SAF in NW
 - ✓ Informed/active SAF stakeholders
 - ✓ NW as leader in creating sustainable, low-carbon transportation fuels









City Pathways





City-Led Clean Energy Innovation

- 100 Percent Renewable Cities
- Carbon Neutral Cities
- New Energy Cities







New Energy Cities





Small/medium-sized cities reducing greenhouse gas (GHG) emissions by accelerating climate-smart, clean energy solutions in:

- Highly efficient buildings
- Renewable energy
- Eco-mobility
- Smart technology



New Energy Cities' Approach

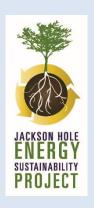
- 1. Set aggressive, attainable carbon reduction targets over 20-30 year period
- 2. Align community energy efforts w/ statewide energy policies
- Do GHG math

 – and create Energy Map and Carbon Wedge graphics

 – to depict how community can reach targets
- 4. Assess carbon reduction potential of tactics for the built environment, transpo, and energy supply
- 5. Create Sustainable Energy Strategies that complement local comprehensive plans









































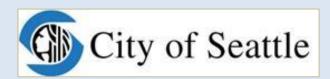








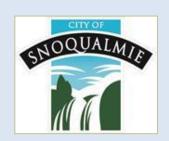






















King County and Cities Carbon Reduction Target: 80% below 2007 by 2050



Elected officials from across King County after the June 2014 K4C Summit

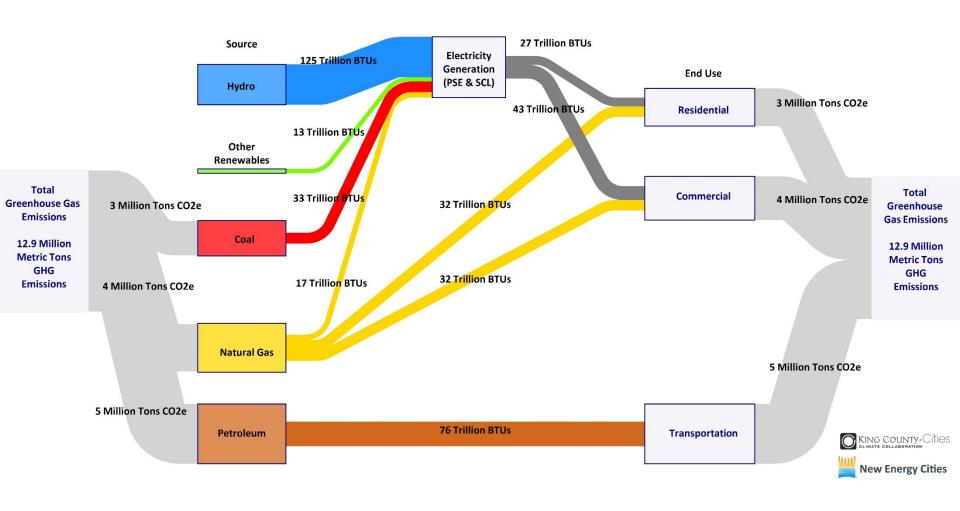
Regional leadership and collaboration

- King County Executive Constantine
 - Climate is a "top three" priority for his second term
- Growth Management Planning Council (GMPC)
 - July 2014 elected officials adopted shared & ambitious countywide targets
- King County-Cities Climate Collaboration (K4C)
 - January 2015 Announced formal adoption of city-county commitments that will help achieve the countywide targets

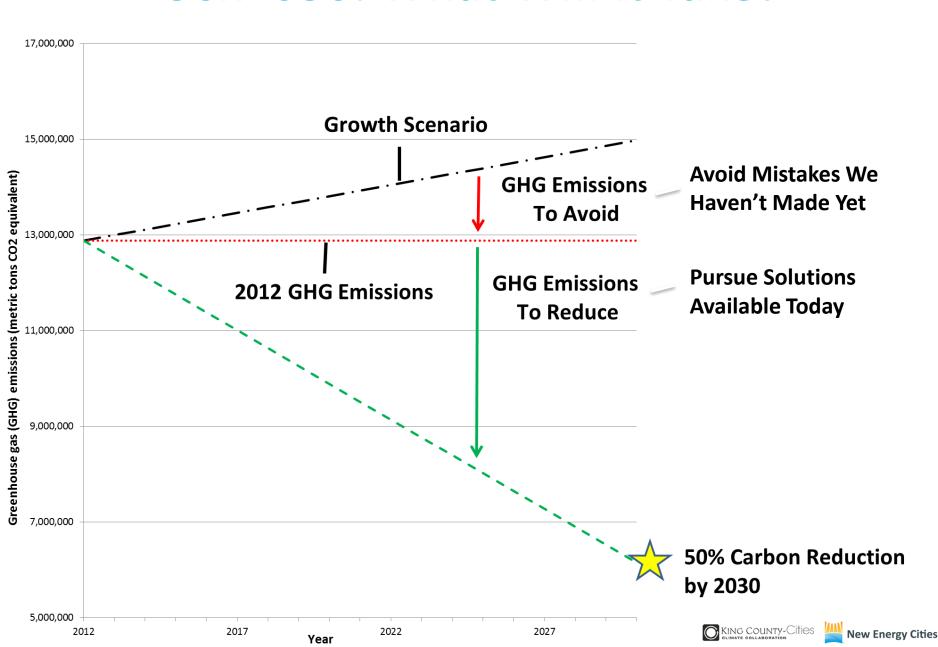
Adopted near-term milestones: 25% reduction by 2020; 50% by 2030



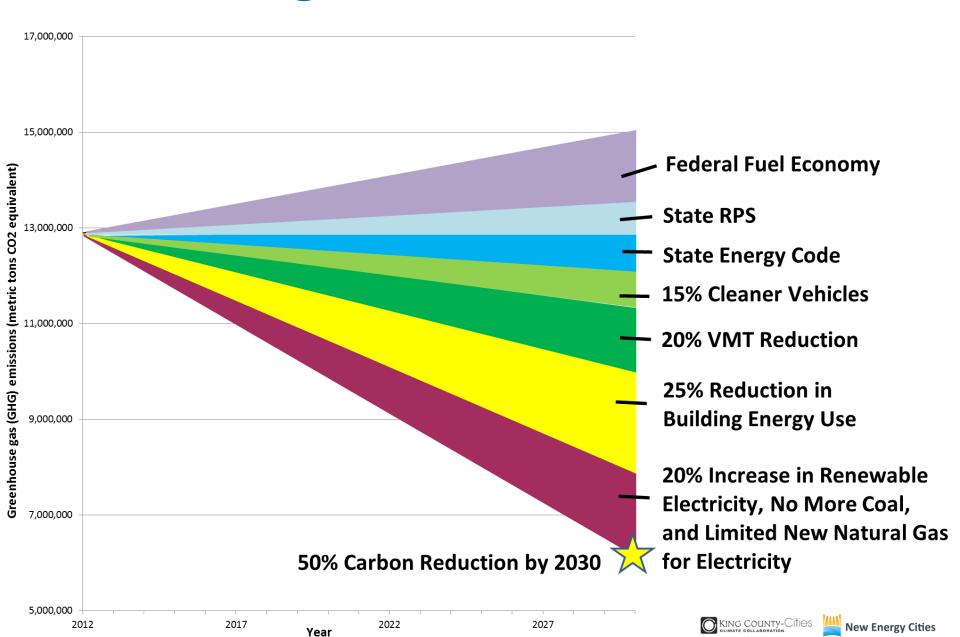
King County 2012 Energy and Carbon Footprint



50x2030: What Will It Take?



Achieving 50 X 30 Reductions





National Action





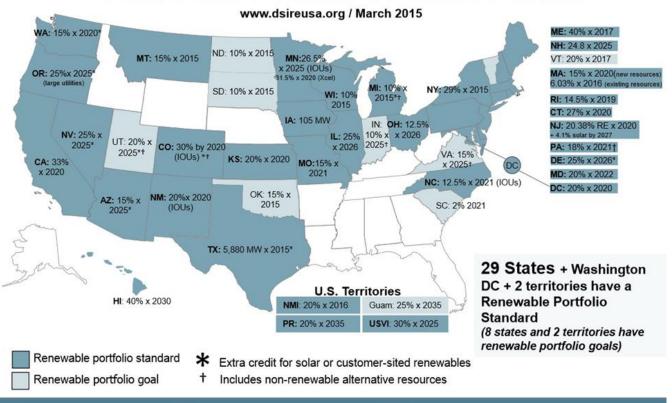
Climate Action in the U.S.-RPS







Renewable Portfolio Standard Policies



Source: U.S. Department of Energy: Energy Efficiency & Renewable Energy.

http://ncsolarcen-prod.s3.amazonaws.com/wp-content/uploads/2014/11/Renewable-Portfolio-Standards.pdf

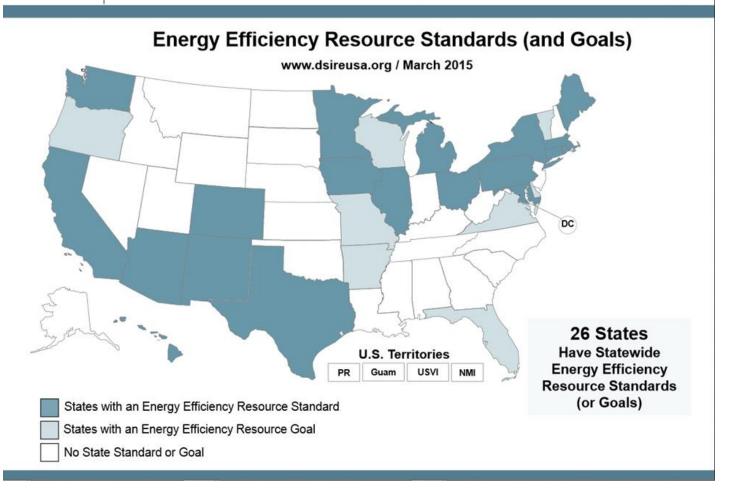


Climate Action in the U.S.-EERS



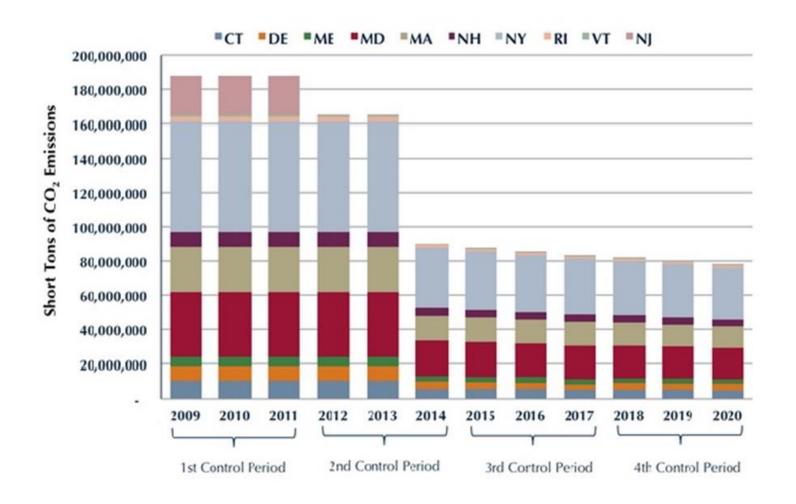








Carbon Pricing in the U.S.





Clean Power Plan



Big Bend Coal Power Station in Apollo Beach, Florida in the United States. (Photo: Wknight94 / Wikimedia Creative Commons)



State Level Climate Efforts

New York—Customer Control

No. Carolina—Energy Freedom Act

Florida—Ballot Solar Choice

Georgia—3rd Party Solar Leasing

Hawaii—Clean Energy Initiative



"Say You Want a Revolution?"



"[t]he U.S. is on the verge of a **REVOLUTION** in the way we make, move, and use energy."



Summary

- Exceptional opportunity
- Revolution required
- Pathways achievable
- Time is of the essence





Thank you

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