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FOUNDED 1892

100% Clean Energy: Madison can lead

**Elizabeth Katt Reinders
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Beyond Coal Campaign**

Measurable Health Benefits from 108,747 MW



BEYOND COAL CAMPAIGN PUBLIC HEALTH BENEFITS



6,616

lives saved



38%

reduction in SO₂ emissions



\$3.1

in health care costs saved



36%

reduction in NO_x



109,134

asthma attacks prevented



451M

metric tons in CO₂ reductions

Health and pollution benefits based on plant-level 2010 annual data associated with 99 GW of coal capacity retired and proposed to retired.



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Why 100% Renewables



Source: USA Today; Joel Pett (7/9/12)



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Madison and Clean Energy



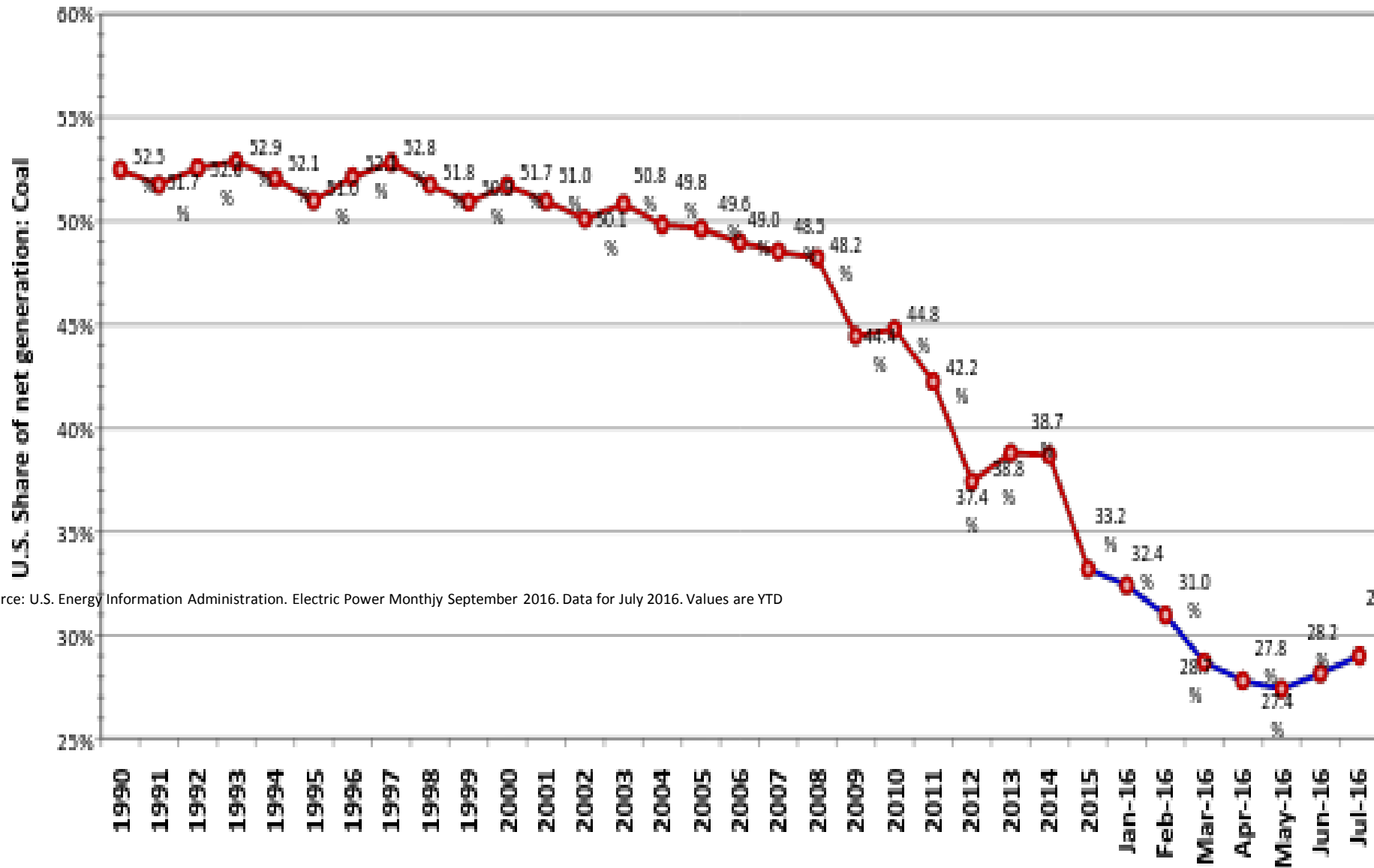


Madison and Clean Energy

Resolution: 100% clean energy and net-zero carbon emissions

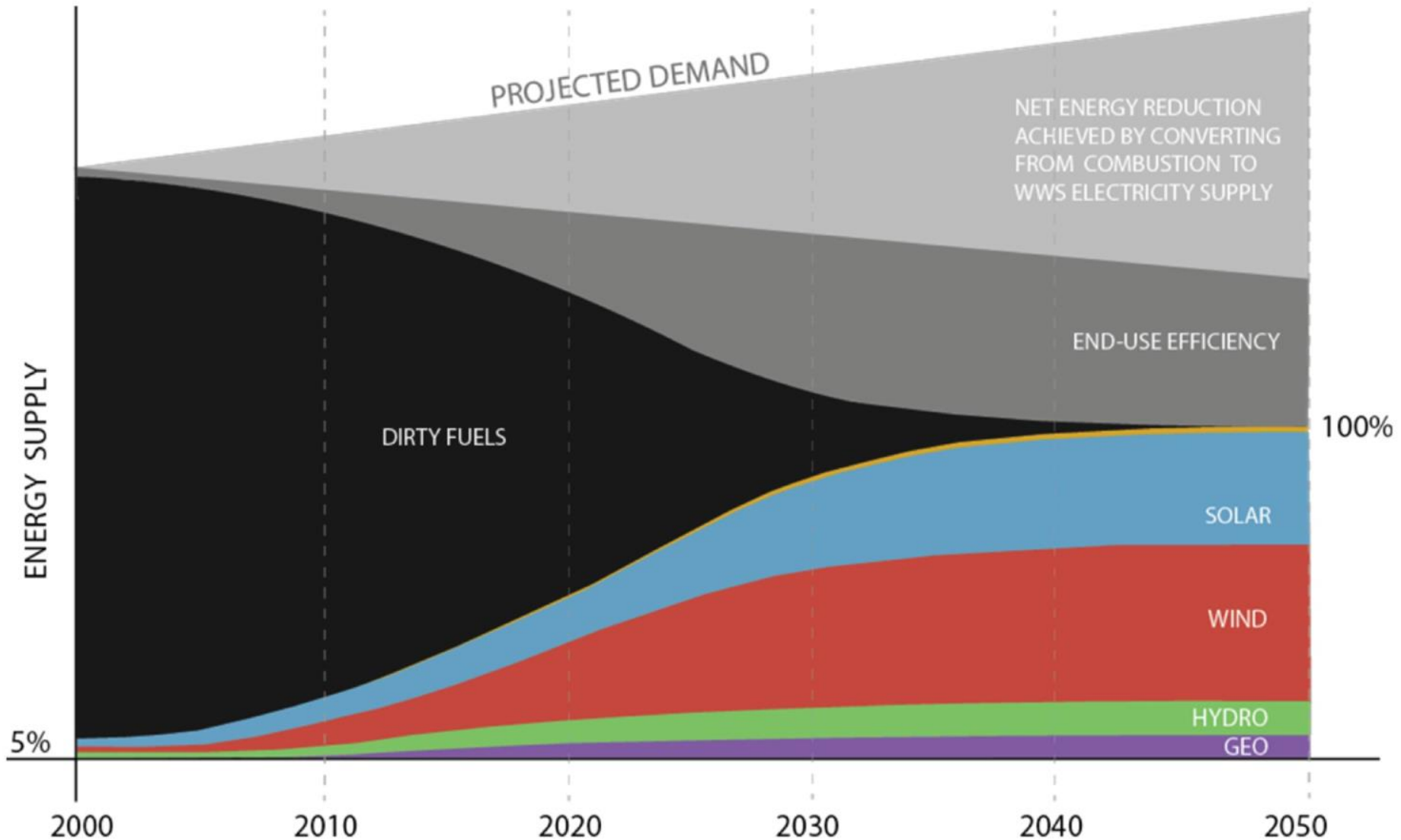
- community wide goal
- resources allocated for city operations plan

Coal's Declining Generation



Source: U.S. Energy Information Administration. Electric Power Monthly September 2016. Data for July 2016. Values are YTD

The vision: 100% by 2050 across the U.S. is possible



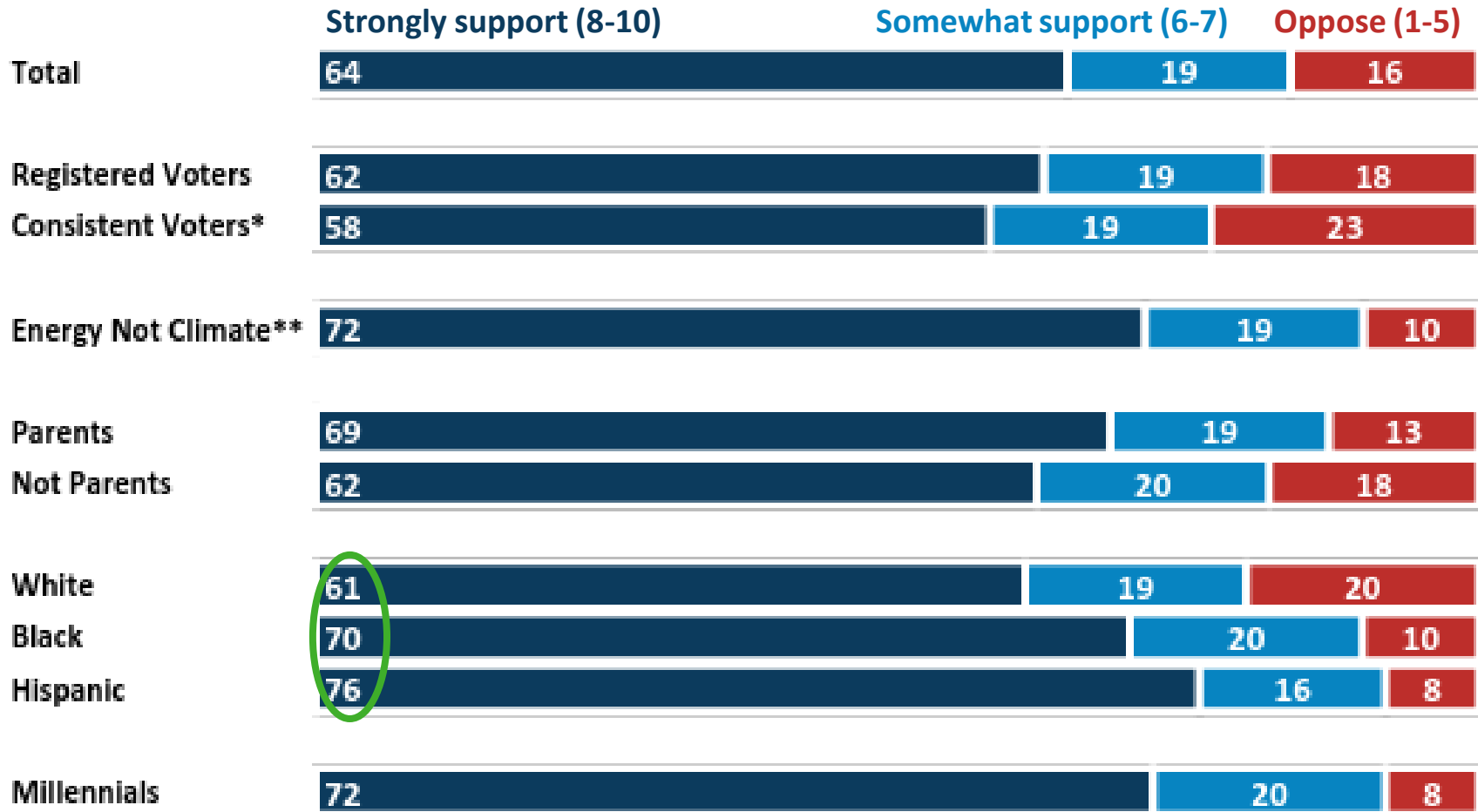
100% Renewable Cities



● Powered by 100% Renewable Energy **● Committed to 100% Renewable Energy** **● Working towards 100% Renewable Energy**

Americans broadly and intensely support the goal

Having read about this idea, do you support or oppose making this a goal for the United States?
(1-10 SCALE, SHOWN ACROSS VERIONS)

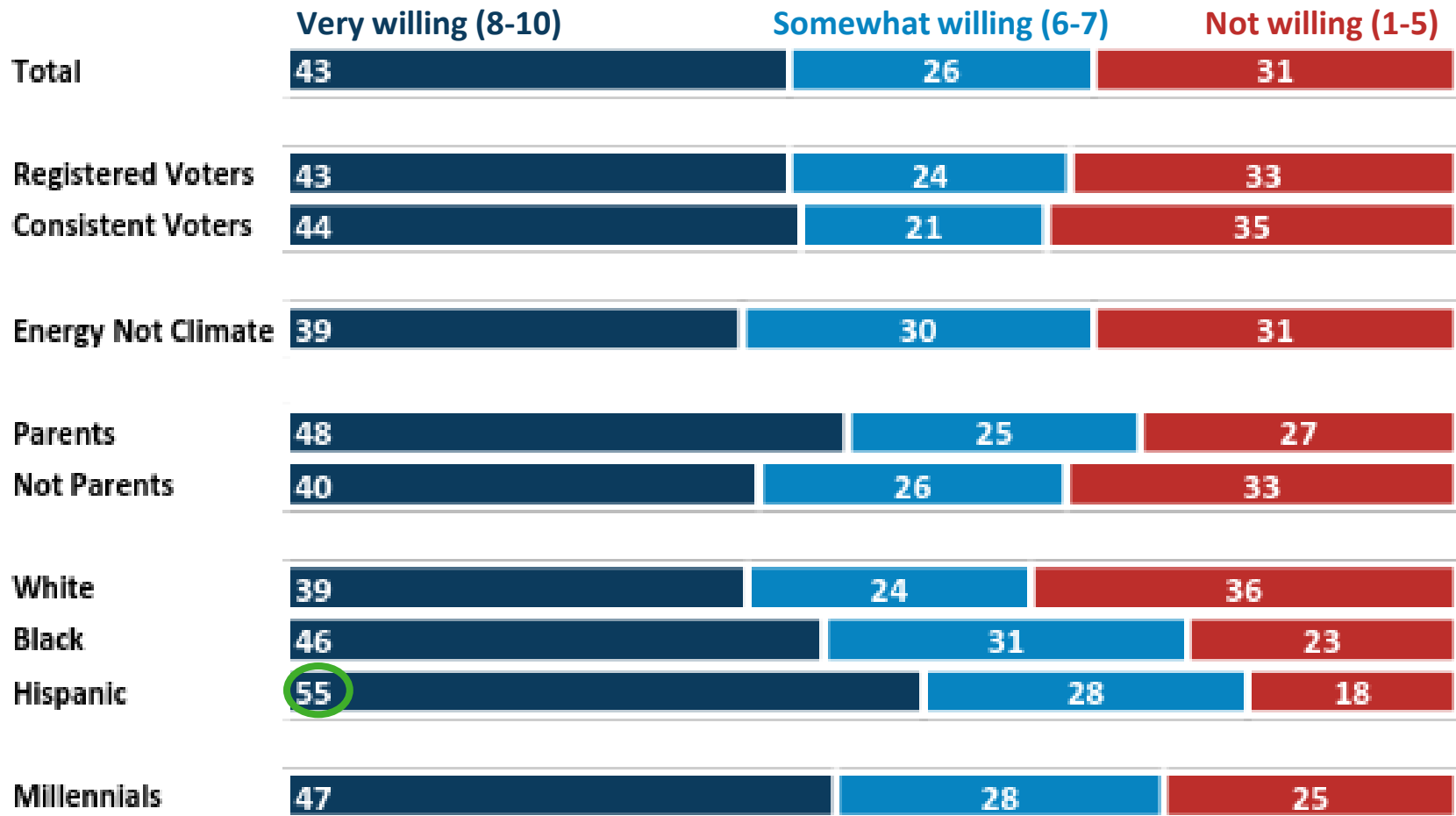


*"Always" vote in non-Presidential years

**Rate increasing toward renewable energy as 8+ on 1-10 scale of priority but not combating climate change

A plurality are strongly inclined to take action

How willing would you be to take action in support of this goal, such as promoting it on social media or contacting an elected official to ask them to support it? (1-10 SCALE, SHOWN ACROSS VERSIONS)



Current energy mix for Madison

source: <https://www.mge.com/about-mge/electricity/elec-from.htm>

Madison is served by small investor-owned utility, Madison Gas & Electric. MG&E electricity comes mostly from coal.

- 48% comes from 2 coal fired power plants
- 30% comes from a purchased medley of mostly coal and gas
- 9 % from oil and gas
- About 13% from clean energy

Support for clean energy among MGE customers

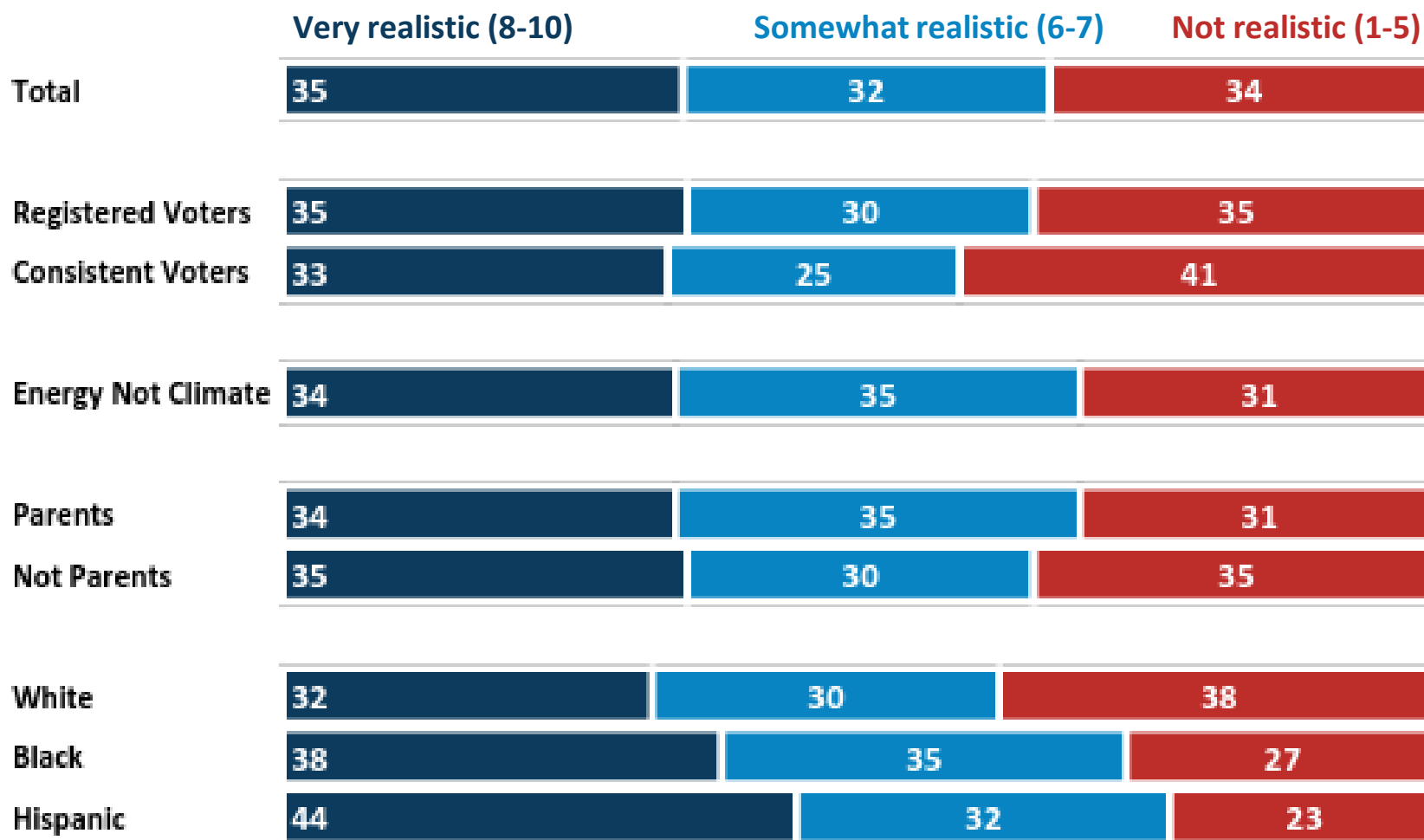
<https://www.mge.com/images/pdf/cec/CustomerPerceptionsStudy.pdf>

- 96% of MGE customers surveyed said it is important to increase renewable energy sources (81% very important, 15% somewhat important)
- Seven in ten customers rank transitioning to a more sustainable energy supply as one of the top three most important goals for the company.

Despite their support, Americans initially split on how realistic a long-term clean energy goal is



And how realistic do you think this goal is? (1-10 SCALE, SHOWN ACROSS VERSIONS)





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100% Renewable Cities - case studies



THESE CITIES SHOW US THAT:



- **Clean energy keeps money in local government coffers.**
- **Clean energy creates local jobs.**
- **Clean energy saves people money.**
- **Clean energy cuts pollution and saves lives.**

Committed to 100% RE

City operations:

- Traverse City - commits to 2020 for city operations
- Grand Rapids, Michigan - commits to 2025 for city operations

City-wide commitments:

- St. Petersburg, FL
- Salt Lake City, UT - by 2032
- Boulder, CO - by 2030

Cities can lead the way

Renewable energy options available to a city that does not have its own electric utility and is located in a rate-regulated state

Municipal operations (city as consumer)

- On-site generation
- Off-site generation (PPA involving generator and local utility – e.g., Renewable Energy Rider)
- Off-site generation (utility shared solar project)
- Off-site generation (green power premium program)

Communitywide (city as service provider/regulator)

- Discounting solar for residents through group solar purchase
- Promote RER to qualifying businesses – incorporate RER in economic development packages
- Vocational training program for underemployed youth
- Tie TIF/other city subsidies to onsite solar development
- Inventorying land parcels for solar development

Ready for 100% recommendations:

- **A full transition of at least the electricity sector to clean, renewable energy**
 - **pilot projects are a good start, but we have to move off coal;**
- **Achieved no later by 2035 for electricity and 2050 for all energy sectors**
 - **electric vehicles are a piece of the puzzle, but we want them powered by clean energy and we want to prioritize public transit**
- **A commitment to achieving equity, affordability & access for all members of the community in the transition to 100% clean energy**
 - **Energy efficiency benefits to all members of the community**



GOAL

Ready for 100% recommendations:

- **A clear definition of clean & renewable resources: natural gas is not clean energy**
- **A commitment to a transparent and inclusive process for planning and implementation, ensuring that all members of the community have an opportunity to participate.**

A photograph of a long, straight asphalt road stretching into the distance under a blue sky with scattered white clouds. The road is flanked by green and yellow grasses. In the foreground, the word "GOAL" is painted in large, white, sans-serif capital letters on the road surface. Above the word, a large white arrow points forward, indicating the direction of the goal.

GOAL

100% is possible. We can turn widespread support into action!



The power of 100% target setting

- 1) Demonstrates political will and raises ambition
- 2) Drumbeat of distributed victories shifts the national discourse
- 3) Mobilizes local stakeholders by providing an official mandate for action
- 4) Sends a signal to utilities and investors
- 5) Achievable at the local level and helps shift state and national progress
- 6) Opens the door for development of strong energy and equity policies

A photograph of a long, straight asphalt road stretching into the distance under a blue sky with scattered white clouds. The road is flanked by green grass and yellow wildflowers. In the foreground, the word "GOAL" is painted in large, white, sans-serif capital letters on the asphalt. Above the word, a large white arrow points forward, indicating the direction of the goal.

GOAL

*“Public
sentiment is
everything.
With public
sentiment
nothing can fail.
Without it,
nothing can
succeed.”*

– Abraham Lincoln





Thank you!

contact:

Elizabeth Katt Reinders

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Resources:

<http://www.sierraclub.org/ready-for-100/cities-are-ready-for-100-clean-energy-10-case-studies>

<http://www.sierraclub.org/ready-for-100>

<http://content.sierraclub.org/coal/>

<http://content.sierraclub.org/coal/years-living-dangerously-activists-fighting-climate-change>

File ID: 45569

Update Energy and Carbon Goals

- Ambitious, community-wide goals
- City government will lead
- A schedule for assessing progress
- Part of a multi-pronged approach

File ID: 45569

Update Energy and Carbon Goals

WHEREAS, the City of Madison (City) desires to formulate and implement energy and carbon policy consistent with the environmental, economic and social objectives articulated in the Madison Sustainability Plan, the City's Energy Work Plan, and existing State of Wisconsin energy policy applicable to local governmental units under **Wis. Stat. sec. 1.12**;

Wisconsin Stat. sec. 1.12

(2) CONSERVATION POLICY. A state agency or local governmental unit shall investigate and consider the maximum conservation of energy resources as an important factor when making any major decision that would significantly affect energy usage.

Wisconsin Stat. sec. 1.12

(5) MEETING ENERGY DEMANDS.

(a) In designing all new and replacement energy projects, a state agency or local governmental unit shall rely to the greatest extent feasible on energy efficiency improvements and renewable energy resources, if the energy efficiency improvements and renewable energy resources are cost-effective and technically feasible and do not have unacceptable environmental impacts.

File ID: 45569

Update Energy and Carbon Goals

WHEREAS, the Common Council has directed the Sustainable Madison Committee to “Create a working group of the Sustainable Madison Committee that includes other community stakeholders to review the City’s climate change goals and update if needed”; and,

File ID: 45569

Update Energy and Carbon Goals

WHEREAS, the City of Madison aims to lead by example in the community, the state, and across the nation,

File ID: 45569

Update Energy and Carbon Goals

THEREFORE, BE IT RESOLVED, by the Common Council of the City of Madison that: The Sustainable Madison Plan must reflect scientific consensus and community aspirations and **establish community-wide Energy and Carbon goals of 100% renewable energy and net-zero carbon emissions,** within a time-frame that aligns with sound and established science, as official energy and carbon goals of the City of Madison; and,

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Update Energy and Carbon Goals

BE IT FURTHER RESOLVED, by the Common Council of the City of Madison that: **up to \$250,000 in re-allocated funding from funds already dedicated to “Sustainability Improvements” in the adopted 2017 Capital Budget shall be available** for third-party expertise required to develop a plan for city operations to achieve goals of 100% renewable energy and net-zero greenhouse gas emissions; and

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Update Energy and Carbon Goals

BE IT FURTHER RESOLVED, by the Common Council of the City of Madison that: by January 2018, City staff will develop a plan for City of Madison operations to achieve 100% renewable energy and net-zero carbon emissions that includes target dates for reaching these goals, interim milestones, budget estimates, and estimated financial impacts; and,

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Progress Report of Sustainable Madison Committee Energy Work Group Concerning Collaboration between City of Madison and MGE December, 2016

1. Expansion of Solar
2. Expanded Use of Electric Vehicles
3. Promote Energy Efficiency
4. Pursue Social Equity and Economic Development Topics
5. Explore Transportation Ideas
6. Collaborate with Dane County