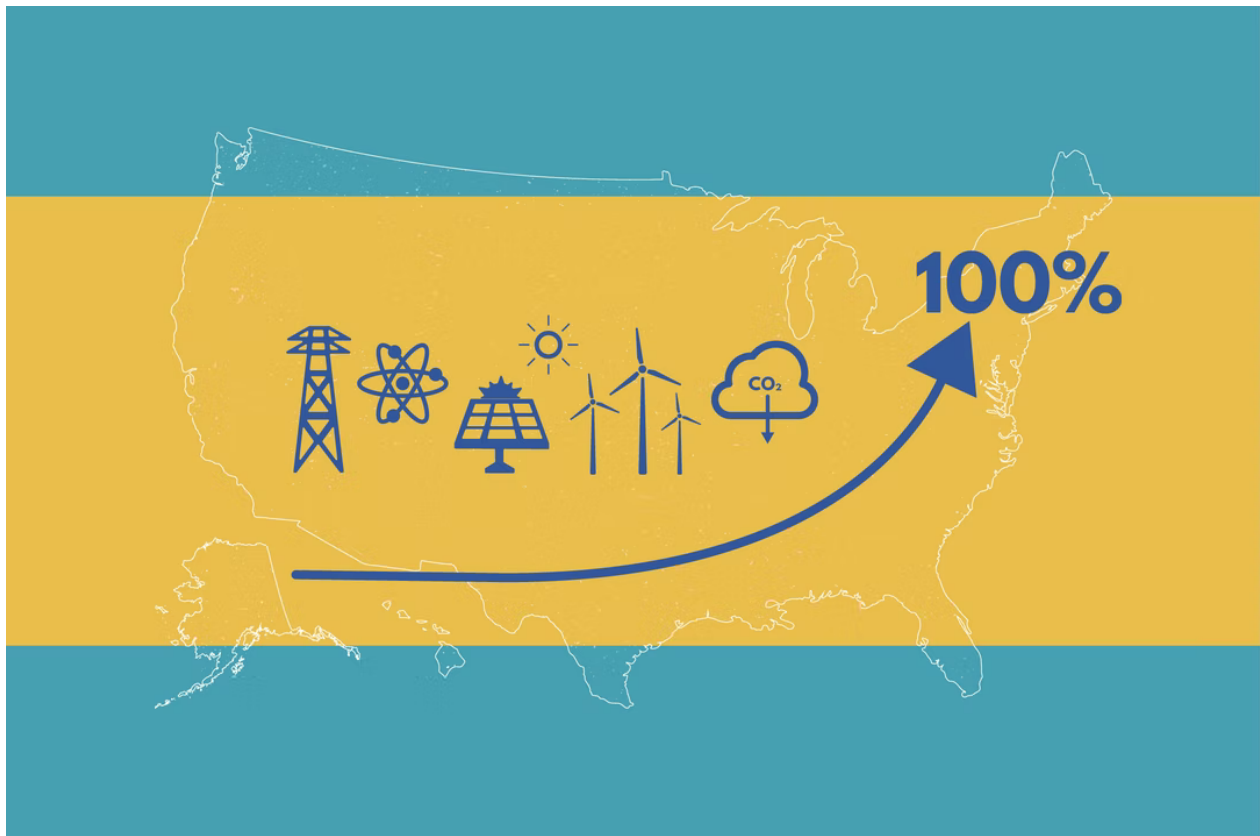# Clean Energy Targets Are Trending

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To meet its climate goals and bring emissions down to net-zero by 2050, the US needs to shift to carbon-free power as fast as possible. While federal efforts to clean up the grid have stalled, Third Way analysis shows that states, major cities, and utilities have literally doubled-down on policies and targets to get the job done. We took the data and created an interactive dashboard to help spot important trends that could be expanded across the country. Two essential themes stood out to us:

1. **Clean energy commitments are rapidly gaining popularity.** Our research identified a total of 153 portfolio standards and other commitments to clean energy since 1983. But a whopping 67% of them were adopted just since 2016.

1

2. **Climate leaders want more technology options to choose from.** Prior to 2016, 90% of commitments were exclusive to renewable energy. That trend has almost completely reversed since then, with 73% of states, utilities, and major cities now embracing "technology-inclusive" commitments like <u>clean energy standards</u> that take advantage of nuclear power, carbon capture, and other carbon-free options.

It makes sense that these trends are catching on. Communities across America are increasingly feeling the impacts of climate change and demanding rapid action. At the same time, governments and utilities are becoming keenly aware of the challenges of getting to zero emissions in a few short decades using only renewable power. Incorporating additional tools like nuclear and carbon capture brings us closer to full decarbonization and significantly reduces the <u>cost of getting there</u>.
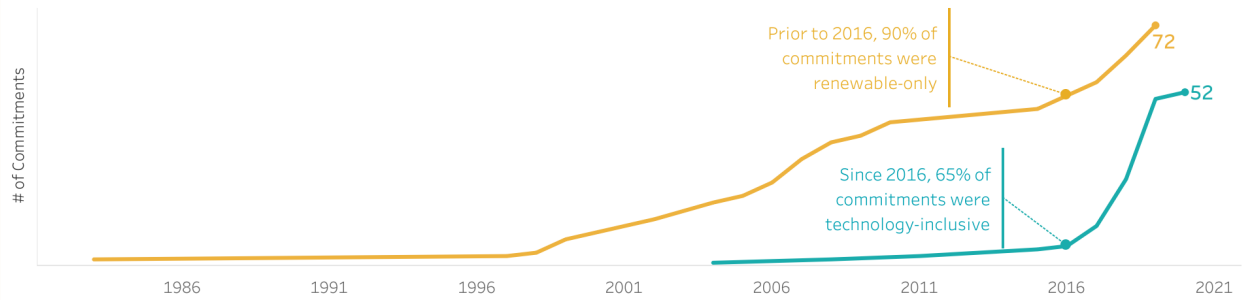
Play around with the dashboard below and see what other patterns jump out at you. If you've got a hot take, we've also included shareable versions of each graphic below the dashboard that you can send to your social media networks.
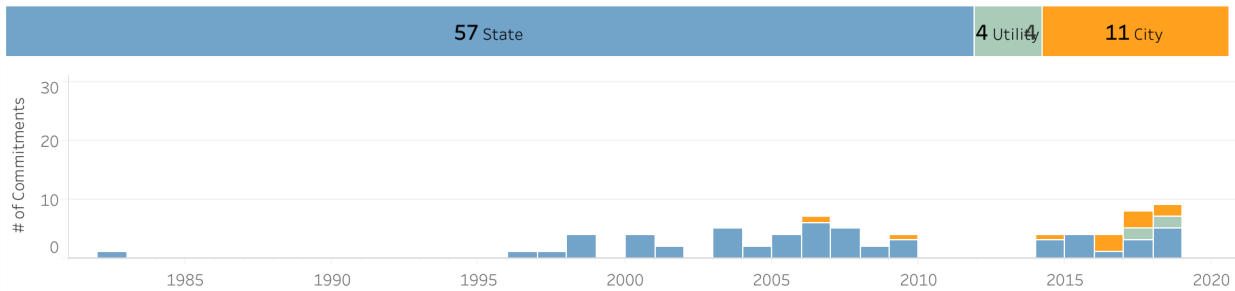
Clean Energy Targets Are Trending

Explore the interactive graphics below by hovering over the data points to view further details. You can also filter commitments by level (state, city, or utility) and whether they're technology-inclusive (yes or no) as you work your way through the dashboard. Filters can be cleared by clicking on the reset button.
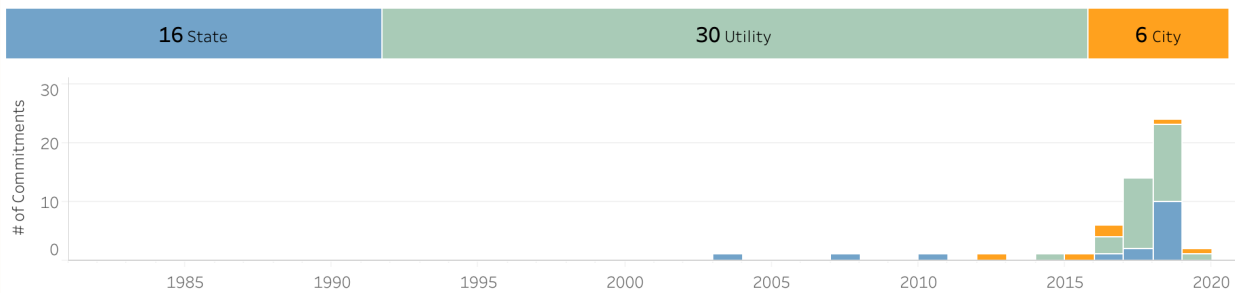
Level
All

Technology-Inclusive?
All

Cumulative Number of Renewable and Technology-Inclusive Commitments Over Time

Prior to 2016, 90% of commitments were renewable-only

72

52

Since 2016, 65% of commitments were technology-inclusive

# of Commitments

1986   1991   1996   2001   2006   2011   2016   2021

Renewable Commitments By Year

| 57 State | 4 Utility | 4 | 11 City |

# of Commitments

30

20

10

0

1985   1990   1995   2000   2005   2010   2015   2020

Technology-Inclusive Commitments By Year

| 16 State | 30 Utility | 6 City |

# of Commitments

30

20

10

0

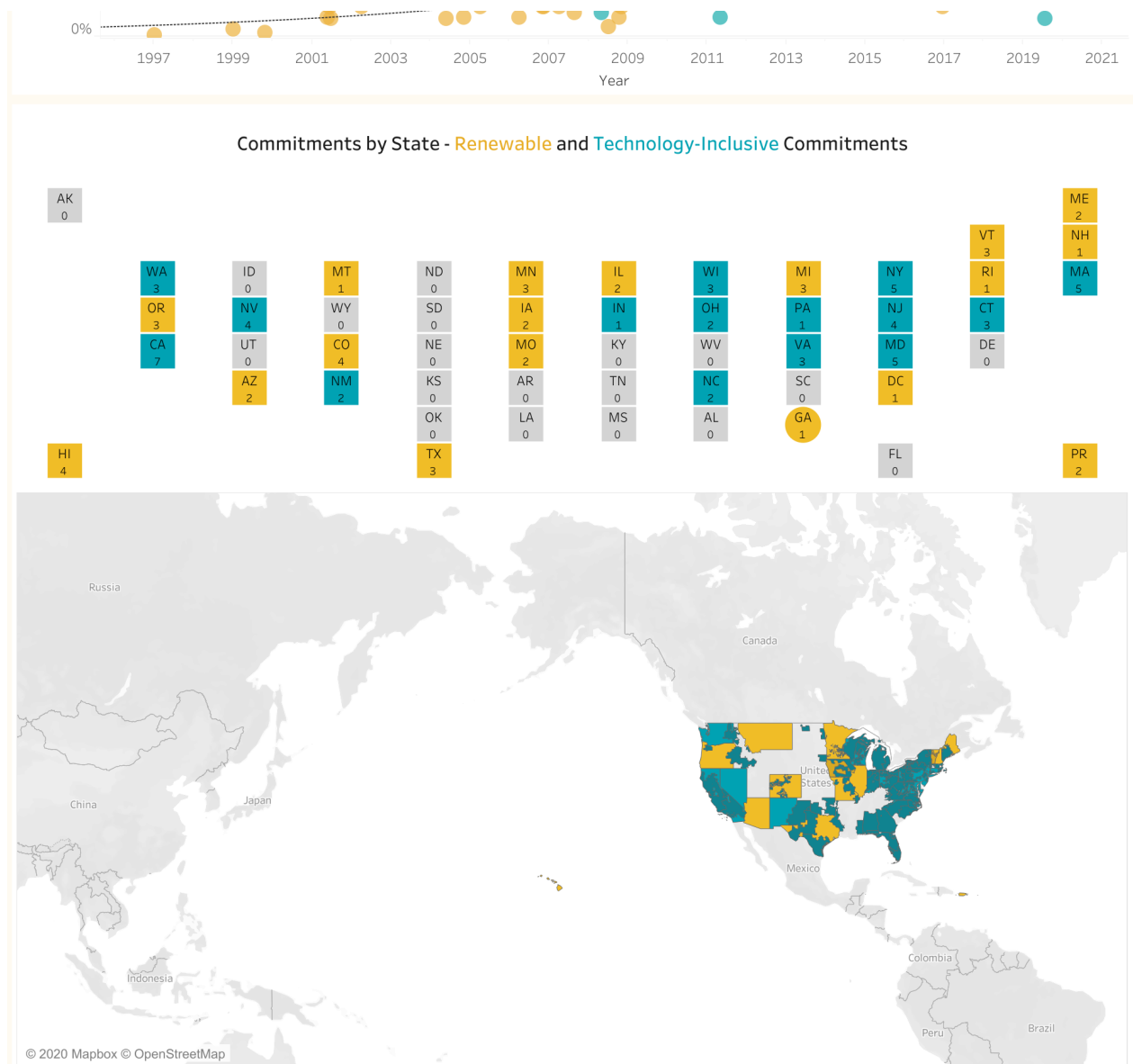1985   1990   1995   2000   2005   2010   2015   2020

Browse the scatterplot and maps below to observe trends in the level of ambition of renewable and technology-inclusive commitments over time. Hover over each item for more details on the commitments. Feel free to filter out the scatterplot by level or technology-inclusivity. Neither of the maps can be filtered out by level or technology-inclusivity.

Level
All

Technology-Inclusive?
All

The Ambition of Renewable and Technology-Inclusive Commitments Over Time

Commitment Percent

100%

50%

0%

1997 1999 2001 2003 2005 2007 2009 2011 2013 2015 2017 2019 2021

Year

Commitments by State - Renewable and Technology-Inclusive Commitments

AK 0											ME 2
										VT 3	NH 1
WA 3	ID 0	MT 1	ND 0	MN 3	IL 2	WI 3	MI 3	NY 5	RI 1	MA 5
OR 3	NV 4	WY 0	SD 0	IA 2	IN 1	OH 2	PA 1	NJ 4	CT 3	
CA 7	UT 0	CO 4	NE 0	MO 2	KY 0	WV 0	VA 3	MD 5	DE 0	
	AZ 2	NM 2	KS 0	AR 0	TN 0	NC 2	SC 0	DC 1		
			OK 0	LA 0	MS 0	AL 0	GA 1			
HI 4			TX 3					FL 0		PR 2

© 2020 Mapbox © OpenStreetMap
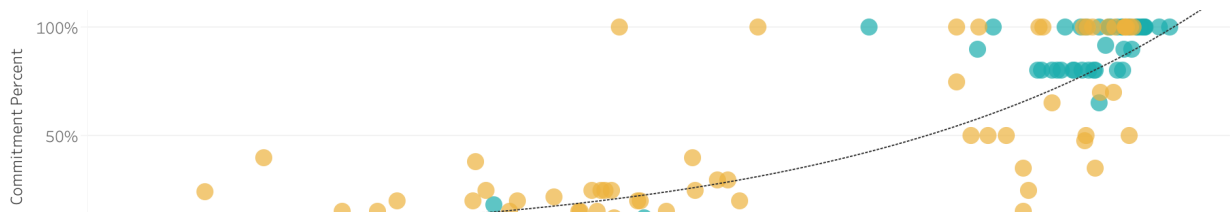
[Clean Energy Targets Are Trending](#)

Methodology

This interactive dashboard displays decarbonization and clean or renewable energy targets, announcements, and policies enacted by states, cities, and utilities.

- **States:** We included all state renewable portfolio standards and clean energy standards and renewable and clean energy targets. We only included updates to existing policies if they increased the overall stringency of the policy. We did not include zero emission credit policies for existing nuclear, credits or subsidies for other clean energy technologies, or carbon pricing policies.

- **Cities:** We included all cities that are among the 50 most populous and that have city-wide decarbonization or clean or renewable energy goals. We excluded cities that only had goals to decarbonize city-owned buildings. We only included the most recent goal for each city.

- **Utilities:** We included all utilities that have official statements or commitments to decarbonize or increase their share of clean or renewable energy. We only included updates to existing policies if they increased the overall stringency of the policy.

The types of commitments have been divided into technology-inclusive or renewables-only categories. Technology-inclusive means that the commitment is open to all clean energy or zero carbon technologies. Renewables-only means that the commitment is only open to the select renewable resources defined by each state, city, or utility.

The types of commitments have also been divided into non-binding targets or binding commitments. Non-binding targets are aspirational goals, targets, pledges, or executive orders. Binding commitments are policies signed into law.

When unable to find the exact day that a commitment was made, we entered the first of that month.

For both maps, the color of a state is determined by its most ambitious and recent state level commitment — yellow for renewable-only and teal for technology-inclusive. To create the second map, we used the utility shapefiles from the Homeland Infrastructure Foundation-Level Data: Electric Retail Service Territories. The color of the utilities does not specify whether a utility is technology-inclusive or not.

Our research drew from Clean Air Task Force's state and utility targets fact sheet, National Resources Defense Council's blog on utilities, Sierra Club's Ready for 100 Commitments, Center For Climate and Energy Solutions' U.S. State Electricity Portfolio Standards Map, National Conference of State Legislatures' State Renewable Portfolio Standards and Goals, North Carolina State University's Database of State Incentives for Renewables & Efficiency, and Smart Electric Power Alliance's Carbon Reduction Tracker.

The sources for each commitment can be found below.

nent	Type of Commitment	Date	Technology-Inclusive?	Source
ewables by 2022	Non-Binding Target	November 21, 2018	No	Link
ewables by 2035	Non-Binding Target	May 1, 2017	No	Link
wables by 2027	Non-Binding Target	August 17, 2017	No	Link

bon neutral by 2050	Non-Binding Target	December 3, 2017	Yes	Link
ewables by 2035	Non-Binding Target	April 10, 2019	No	Link
an energy by 2022	Non-Binding Target	November 3, 2020	Yes	Link Link Link
ewables by 2030 and 80% carbon free economy-wide by	Non-Binding Target	July 17, 2018	No	Link
bon neutral by 2050	Non-Binding Target	April 22, 2020	Yes	Link
bon neutral by 2050	Non-Binding Target	September 13, 2017	Yes	Link
ewables by 2045	Non-Binding Target	April 29, 2019	No	Link
ewables by 2040	Non-Binding Target	February 6, 2020	No	Link
ewables by 2030	Non-Binding Target	April 27, 2018	No	Link
bon neutral by 2050	Non-Binding Target	April 22, 2019	Yes	Link
ewables by 2050	Non-Binding Target	September 19, 2019	No	Link
bon neutral by 2060	Non-Binding Target	April 12, 2016	Yes	Link
ewable energy economy-wide by 2050	Non-Binding Target	June 1, 2017	No	Link
ewables by 2035	Non-Binding Target	December 15, 2015	No	Link
ewables by 2030	Non-Binding Target	December 1, 2010	No	Link
ewables by 2022	Non-Binding Target	October 7, 2007	No	Link
bon neutral by 2050	Non-Binding Target	June 17, 2013	Yes	Link
on reduction by 2050	Non-Binding Target	April 17, 2017	Yes	Link
an energy by 2050	Binding Standard	October 29, 2020	Yes	Link

...wables by 2025	Binding Standard	November 14, 2006	No	Link
...n electricity by 2045	Binding Standard	September 10, 2018	Yes	Link
...wables by 2030	Binding Standard	October 7, 2015	No	Link
...wables by 2017	Binding Standard	September 12, 2002	No	Link
...ewables by 2040	Non-Binding Target	May 30, 2019	No	Link
...wables by 2020 from investor-owned utilities	Binding Standard	March 22, 2010	No	Link
...wables by 2015 from state's largest utilities	Binding Standard	November 1, 2004	No	Link
...bon free by 2040	Non-Binding Target	September 4, 2019	Yes	Link
...wables by 2030	Binding Standard	May 9, 2018	No	Link
...wables by 2020	Binding Standard	April 29, 1998	No	Link
...ewables by 2032	Binding Standard	January 18, 2019	No	Link
...ewables by 2045	Binding Standard	June 8, 2015	No	Link
...wables by 2030	Binding Standard	June 1, 2009	No	Link
...wables by 2020	Binding Standard	June 1, 2004	No	Link
...wables by 2010	Non-Binding Target	June 29, 2001	No	Link
...wables by compliance year 2025-2026 from large ...owned utilities	Binding Standard	August 1, 2007	No	Link
...n energy by 2025	Non-Binding Target	May 1, 2011	Yes	Link
...y goal of 1,000 MW of wind generating capacity by 2010	Non-Binding Target	September 1, 2001	No	Link
...owned utilities must own or contract 105 MW of renewable ...g capacity	Binding Standard	January 1, 1983	No	Link
...ewables by 2050	Binding	June 18,	No	Link

		Standard	2019		
:wables by 2017		Binding Standard	September 1, 1999	No	Link
ın electricity by 2040		Non-Binding Target	May 22, 2019	Yes	Link
:wables by 2030		Binding Standard	May 22, 2019	No	Link
:wables by 2020		Binding Standard	February 1, 2017	No	Link
:wables by 2022		Binding Standard	April 1, 2008	No	Link
ewables by 2018		Binding Standard	May 26, 2004	No	Link
'S growth to 2% annually from 2020 to 2029 and 1% r, increasing the Class I obligation from 25% to 35% in		Binding Standard	August 9, 2018	No	Link
ı energy by 2050		Binding Standard	August 11, 2017	Yes	Link
ıative portfolio standard by 2020		Binding Standard	July 1, 2008	No	Link
:wables by 2020, increasing 1% annually after		Binding Standard	April 1, 2002	No	Link
wables by 2025		Non-Binding Target	December, 21, 2016	No	Link
wables by 2021		Binding Standard	December, 21, 2016	No	Link
wables by 2015		Binding Standard	October 6, 2008	No	Link
:wables by 2025		Binding Standard	February 22, 2007	No	Link
wable by 2015		Non-Binding Target	May 25, 2001	No	Link
wables by 2021		Binding Standard	November 4, 2008	No	Link
wables by 2015		Binding Standard	April 1, 2005	No	Link
wables by 2030 and 100% carbon free by 2050		Binding Standard	November 3, 2020	Yes	Link
wables by 2030 and 100% carbon free by 2050		Binding Standard	April 19, 2019	Yes	Link

wables by 2025	Binding Standard	July 1, 2009	No	Link
wables by 2013	Binding Standard	June 8, 2001	No	Link
rables by 2001	Binding Standard	January 1, 1997	No	Link
newables by 2025	Binding Standard	May 11, 2007	No	Link
an energy by 2050	Non-Binding Target	May 23, 2018	Yes	Link
wables by 2030	Binding Standard	May 23, 2018	No	Link
newables by 2021	Binding Standard	April 12, 2006	No	Link
le targets of 4% Class I and 2.5% Class I or II by 2012	Binding Standard	January 1, 1999	No	Link
an energy by 2045	Binding Standard	March 22, 2019	Yes	Link
wables by 2030 and zero emissions by 2040	Binding Standard	July 18, 2019	Yes	Link
wables by 2030	Binding Standard	August 1, 2016	No	Link
wables by 2015	Binding Standard	January 1, 2010	No	Link
wables by 2013	Binding Standard	September 24, 2004	No	Link
carbon reduction by 2030	Non-Binding Target	August 16, 2019	Yes	Link
newables by 2021	Binding Standard	August 20, 2007	No	Link
ewable energy by 2026	Binding Standard	July 23, 2019	Yes	Link
ernative energy by 2024	Binding Standard	May 1, 2008	Yes	Link
wables by 2040	Binding Standard	March 1, 2016	No	Link
wables by 2025	Binding Standard	June 6, 2007	No	Link
native energy by 2021	Binding	November	Yes	Link

	Standard	30, 2004		
...ewables by 2050	Binding Standard	April 12, 2019	No	[Link](#)
...wables by 2035	Binding Standard	July 1, 2010	No	[Link](#)
...an energy by 2030	Non-Binding Standard	January 17, 2020	Yes	[Link](#)
...newables by 2035	Binding Standard	June 29, 2004	No	[Link](#)
...,000 MW New Renewables by 2025	Binding Standard	December 16, 1999	No	[Link](#)
...wables by 2032	Binding Standard	June 11, 2015	No	[Link](#)
...wables by 2017	Binding Standard	March 1, 2008	No	[Link](#)
...wables by 2017	Non-Binding Target	June 14, 2005	No	[Link](#)
...an energy by 2050	Binding Target	April 12, 2020	Yes	[Link](#)
...wables by 2025	Non-Binding Target	April 4, 2007	No	[Link](#)
...an energy by 2045	Binding Standard	May 7, 2019	Yes	[Link](#)
...wables by 2020	Binding Standard	November 7, 2006	No	[Link](#)
...bon free by 2050	Non-Binding Target	August 16, 2019	Yes	[Link](#)
...wables by 2015	Binding Standard	March 31, 2006	No	[Link](#)
...ewabled by 2012	Binding Standard	October 27, 1999	No	[Link](#)
...on reduction by 2022 and 70% by 2030	Non-Binding Target	April 2, 2019	Yes	[Link](#)
...bon free by 2050	Non-Binding Target	July 22, 2020	Yes	[Link](#)
...bon free by 2050	Non-Binding Target	September 28, 2020	Yes	[Link](#)
...on reduction by 2050	Non-Binding Target	February 6, 2018	Yes	[Link](#)

bon free by 2050	Non-Binding Target	January 22, 2020	Yes	Link
bon free by 2035	Non-Binding Target	March 9, 2020	Yes	Link
bon free by 2035	Non-Binding Target	February 13, 2019	Yes	Link
bon free by 2045	Non-Binding Target	April 18, 2019	Yes	Link
on reduction by 2030 and 90% by 2050	Non-Binding Target	June 26, 2020	Yes	Link Link
bon free by 2050	Non-Binding Target	February 24, 2020	Yes	Link
n energy by 2040	Non-Binding Target	June 7, 2019	Yes	Link
on free by 2040	Non-Binding Target	February 19, 2018	Yes	Link
bon free by 2050	Non-Binding Target	February 11, 2020	Yes	Link
on free by 2040	Non-Binding Target	September 26, 2019	Yes	Link
bon free by 2050	Non-Binding Target	March 28, 2018	Yes	Link
on free by 2050	Non-Binding Target	May 16, 2017	Yes	Link
bon free by 2050	Non-Binding Target	September 17, 2019	Yes	Link
on reduction by 2025 and 40% by 2035	Non-Binding Target	January 1, 2018	Yes	Link
bon free by 2050	Non-Binding Target	September 24, 2020	Yes	Link
on reduction by 2050	Non-Binding Target	January 30, 2020	Yes	Link
bon free by 2050	Non-Binding Target	November 9, 2020	Yes	Link
ewables by 2030	Non-Binding Target	April 13, 2019	No	Link
ewables by 2045	Non-Binding Target	December 23, 2016	No	Link
wables by 2021	Non-Binding	January 8,	No	Link

		Target	2019		
ewables by 2030		Non-Binding Target	September 19, 2018	No	Link
bon free by 2045		Non-Binding Target	March 26, 2019	Yes	Link
bon free by 2040		Non-Binding Target	July 14, 2020	Yes	Link
bon free by 2050		Non-Binding Target	May 14, 2019	Yes	Link
ewables by 2021		Non-Binding Target	May 30, 2018	No	Link
on reduction by 2050		Non-Binding Target	June 18, 2018	Yes	Link
on reduction by 2021		Non-Binding Target	September 6, 2018	Yes	Link
on reduction by 2028		Non-Binding Target	October 30, 2018	Yes	Link
bon free by 2050		Non-Binding Target	August 18, 2020	Yes	Link
on reduction by 2045		Non-Binding Target	December 10, 2019	Yes	Link
bon free by 2050		Non-Binding Target	September 24, 2019	Yes	Link
on reduction		Non-Binding Target	July 30, 2019	Yes	Link
bon free by 2050		Non-Binding Target	January 6, 2020	Yes	Link
bon free by 2050		Non-Binding Target	October 14, 2020	Yes	Link
million tons of greenhouse gas emissions from company s through 2022		Non-Binding Target	July 12, 2018	Yes	Link
ssions reduction in emissions by 2030		Non-Binding Target	October 21, 2019	Yes	Link
n-carbon resource mix by 2030		Non-Binding Target	December 6, 2018	Yes	Link
on reduction by 2050		Non-Binding Target	April 24, 2018	Yes	Link
on free by 2030		Non-Binding Target	June 6, 2019	Yes	Link

...ction in emissions by 2040, 80% reduction in emissions by	Non-Binding Target	January 30, 2018	Yes	Link
...issions free by 2040, 70% by 2032	Non-Binding Target	April 22, 2019	Yes	Link
...bon free by 2050, 80% by 2046	Non-Binding Target	July 25, 2019	Yes	Link
...ction in carbon emissions by 2040.	Non-Binding Target	December 15, 2017	Yes	Link
...bon free by 2030	Non-Binding Target	July 17, 2020	Yes	Link
...ction in emissions by end of 2030. 90% reduction in ...s by 2050	Non-Binding Target	April 3, 2019	Yes	Link
...on reduction by 2050	Non-Binding Target	November 1, 2017	Yes	Link
...bon free by 2050, 50% by 2030	Non-Binding Target	September 21, 2020	Yes	Link
...ction in emissions by end of 2020. 70% reduction in ...s by 2030	Non-Binding Target	August 6, 2019	Yes	Link
...uction in emissions from coal in NM by end of 2020. 100% ... in emissions from coal in CO by 2030.	Non-Binding Target	September 1, 2020	Yes	Link
...on reduction by 2035	Non-Binding Target	June 26, 2020	Yes	Link
...on reduction by end of 2023	Non-Binding Target	August 1, 2018	Yes	Link
...on reduction by 2050	Non-Binding Target	August 10, 2018	Yes	Link
...bon free by 2050	Non-Binding Target	December 4, 2018	Yes	Link

TOPICS

CLEAN ENERGY STANDARDS 23