

Countries, States, Districts, Counties, Cities, Towns, and International Businesses That Have Reached or Committed to 100 Percent Renewable Energy in One or More Energy Sectors Plus Eight Proposed U.S. Laws/Resolutions to go to 100 Percent

In
100% Clean, Renewable Energy and Storage for Everything
Textbook in Preparation

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Summary

This document contains three tables. The first is a list of countries; U.S. states, districts, and territories; U.S. counties; and U.S. towns and cities that have either reached or committed to 100 percent renewable electricity.

The second table lists eight proposed U.S. resolutions or laws for the United States to go to 100 percent clean, renewable energy in one or more energy sector.

The third table lists 167 international companies that have committed to 100 percent clean, renewable wind-water-solar (WWS) electricity, in the annual average, to run their global operations.

Table 9.1. List of countries and U.S. states and districts, counties, and towns and cities that have committed to or reached 100 or near 100 percent clean, renewable energy as of January 26, 2019. The country, state, and district commitments are all in the electric power sector. The county, town, and city commitments are either for the electricity sector (in most cases) or in all sectors, and are beyond just town/city/country operations. Cities in blue have a population of at least 190,000 as of January 26, 2019. Countries having reached 95 to 100 percent WWS are from Table 8.1. Country commitments are from Table R8 of REN21 (2018) (whose data are for 2017 end) for all countries except Spain and Portugal, which committed during 2018. County, town, and city commitments are from Sierra Club (2019).

Countries that have reached 95 to 100 percent WWS electricity					
Iceland	Tajikistan	Paraguay	Costa Rica	Norway	Albania
Countries that have laws requiring 100 percent renewable electricity					
Afghanistan	Cook Islands ¹	Guatemala	Marshall Islands	Portugal	Sudan
Aruba ¹	Congo, DR	Haiti	Mongolia	Rwanda	Tanzania
Bangladesh	Costa Rica ³	Honduras	Morocco	Samoa ³	Timor-Leste
Bhutan	Denmark	Kenya	Nepal	Senegal	Tunisia
Burkina Faso	Dominican Rep.	Kirbati	Niger	Solomon Islands	Tuvalu ¹
Cabo Verde ²	Ethiopia	Lebanon	Palau	South Sudan	Scotland ¹
Cambodia	Fiji ³	Madagascar	Palestine	Spain	Vanuatu ³
Colombia	Gambia	Malawi	Papua N. Guinea ³	Sri Lanka	Vietnam
Comoros	Ghana	Maldives	Philippines	St. Lucia	Yemen
U.S. states, districts, and territories that have laws requiring 100 or up to 100 percent electric power from renewables					
California	Hawaii	New Mexico	Puerto Rico	Washington D.C.	
U.S. counties that have committed to 100 percent renewables					
Buncombe, NC	Multnomah, OR	Pueblo, CO	Summit, UT	Ventura, CA	Whatcom, WA
Floyd, VA	Orange, NC	Summit, CO	Taos, NM	Wake, NC	
U.S. towns and cities that have reached 100 percent renewable electricity					

Aspen, CO	Burlington, VT	Georgetown, TX	Greensburg, KS	Kodiak Island, AK	Rock Port, MO
U.S. towns and cities that have committed to 100 percent renewables					
Abita Springs, LA	Cornish, NH	Gainseville, FL	Moab, UT	Questa, NM	Springfield, PA
Ambler, PA	Cottonwood Hts UT	Goleta, CA	Monona, WI	Radnor, PA	St. Louis, MO
Amherst, MA	Culver City, CA	Hanover, NH	Monterey, CA	Red River, NM	St. Louis Park, MN
Angel Fire, NM	Del Mar, CA	Haverford, PA	Nederland, CO	Rolling Hills Est., CA	St. Paul, MN
Apex, NC	Denton, TX	Hillsborough, NC	Nevada City, CA	Salt Lake City, UT	St. Petersburg, FL
Atlanta, GA	Denver, CO	Kansas City, MO	New Brunswick, NJ	San Diego, CA	Tallahassee, FL
Augusta, GA	Downington, PA	Keene, NH	Norman, OK	San Francisco, CA	Taos, NM
Berkeley, CA	Dunedin, FL	Kennett, PA	Northampton, MA	San Jose, CA	Taos, Ski Valley, NM
Blacksburg, VA	Eagle Nest, NM	La Mesa, CA	Ojai, CA	San Luis Obispo, CA	Thousand Oaks, CA
Boulder, CO	East Bradford, PA	Lafayette, CO	Orlando, FL	Santa Barbara, CA	Traverse City, MI
Breckenridge, CO	East Hampton, NY	Largo, FL	Oxnard, CA	Santa Monica, CA	Truckee, CA
Cambridge, MA	Eau Claire, WI	Longmont, CO	Palo Alto, CA	Sarasota, FL	Uwchlan, PA
Chula Vista, CA	Edmonds, WA	Lowell, MA	Park City, UT	Schuylkill, PA	Ventura, CA
Cincinnati, OH	Encinitas, CA	Madison, WI	Phoenixville, PA	Solana Beach, CA	West Chester, PA
Clarkston, GA	Eureka, CA	Menlo Park, CA	Plainfield, NH	South Lake Tahoe, CA	West Hollywood, CA
Cleveland, OH	Evanston, IL	Middleton, WI	Portland, OR	South Pasadena, CA	Whitemarsh, PA
Columbia, SC	Fayetteville, AR	Milwaukie, OR	Portola Valley, CA	Southampton, NY	Windsor, MA
Concord, NH	Fort Collins, CO	Minneapolis, MN	Pueblo, CO	Spokane, WA	

Country commitments are all for 2050, except ¹2020; ²2025; ³2030

Table 9.3. Proposed United States House of Representatives and Senate resolutions and bills between 2015 and 2019 for the U.S. to go to 100 percent WWS in one or more energy sectors. None has been voted on to date.

Name	Resolution or bill?	Date introduced	Scope of proposed resolution or law
^a H.Res. 540	Resolution	Nov. 30, 2015	100 percent clean, renewable energy for all purposes by 2050
^b S.Res. 632	Resolution	Dec. 7, 2016	100 percent clean, renewable electricity for all purposes by 2050
^c S. 987	Bill	Apr. 27, 2017	100 percent clean and renewable electricity and public transport by 2050
^d H.R. 3314	Bill	Jul. 19, 2017	100 percent clean and renewable electricity by 2050
^e H.R. 3671	Bill	Sep. 8, 2017	100 percent clean (only renewable) electricity by 2035
^f H.R. 330	Bill	Jan. 8, 2019	100 percent renewable electricity by 2035
^g H.Res. 109	Resolution	Feb. 7, 2019	100 percent clean, renewable, zero-C energy for all purposes by 2030
^h S.Res. 59	Resolution	Feb. 7, 2019	100 percent clean, renewable, zero-C energy for all purposes by 2030

Sources: ^aHouse (2015); ^bSenate (2016); ^cSenate (2017); ^dHouse (2017a); ^eHouse (2017b); ^fHouse (2019a); ^gHouse (2019b); ^hSenate (2019).

By March 26, 2019, 167 international companies had committed to provide 100 percent of their electricity for global operations, in the annual average, from renewables (Table 9.4). The first company to reach 100 percent WWS in the annual average was Google, who reached it during 2017. Apple met the 100 percent goal for its global operations during April 2018.

Table 9.4. International companies (167, in alphabetical order) that have committed to go to 100 percent renewable electricity in the annual average in their global operations, as of March 26, 2019. They may either produce the electricity themselves or source it from the market. Renewables include wind, solar, geothermal, hydroelectric, or biogas. Companies in blue are among the top 10 biggest companies in the world in terms of total value of a company's shares of stock. From RE100 (2019).

3M	BT	Dentsu Aegis	HAP	Lego Group	Rackspace	Telefonica
ABInBev	Burberry	Diageo	Heathrow Airport	Lloyds Banking	RB	Tesco
Adobe	CaixaBank	DNB	Helvetia	Lyft	Roy. Bank Scot.	Tetra Pak
AEON	Califia Farms	Ebay	HP Enterprise	Mace	RELX Group	T-Mobile
AkzoNobel	Canary Wharf	Elion	HP Inc.	Mahindra	Royal DSM	Toda Corp.
Allianz	Capital One	Elopak	HSBC	M&S	Philips	TRIDL

Alstria	Carlsberg Group	Envipro	IFF	Mars	Ricoh	UBS
Amalgamated Bk	Citi	Equinix	IHS Markit	Marui Group	Salesforce	Unilever
Apple	Clif Bar	Estee Lauder	Ikea	McKinsey & Co.	SAP	Vail Resorts
Askul	Coca Cola	Etsy	Infosys	Microsoft	SAVE S.p.A.	Vaisala
Astra Zeneca	Colruyt Group	Facebook	ING	Morgan Stanley	Schneider Elec.	Vestas
Aurora	Commerzbank	Formula-E	Interface	Nestle	Schroders	VF Corp.
Autodesk	Commonwealth Bk	Fifth Third Bank	Iron Mountain	Nike	Sekisui House	Visa
Aviva	Coop Sapporo	Firmenich	Johnson & Johnson	Nordea	SGS	VM Ware
Axa	Corbion	Fujitsu	Johann Shinkin Bank	Novo Nordisk	Signify	Vodafone
B of A	Credit Agricole	Fuyo Lease	JPMorgan Chase	NRI	Sky	Voya
Bankia	Crown Estate	Gatwick Airport	Jupiter	O'right, Hair	Sony	Walmart
BBVA	Daito Trust	General Motors	Kellogg's	Organic Valley	Starbucks	Watami
Bestseller	Daiwa House	Givaudan	Kingspan	Pearson	Steelcase	WeWork
Biogen	Dalmia	Goldman Sachs	Konica Minolta	P&G	Swiss Re	Wells Fargo
Bloomberg	Danone	Google	KPN	Proximus	Swiss Post	Wonderful Co.
BMW Group	Danske Bank	Grupo Bimbo	L'Occitane Group	Prudential	Tata Motors	Workday
British Land	DBS	Gurmengroup	La Poste	PVH	TCI Co.	Yoox
Broad Group	Decathlon	H&M	Landsec	PwC	TD Bank Group	

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