

## Global Events Influencing Renewable Energy Sentiment (2022–2024)

Date (YYYY-MM- DD)	Event Name	Probability Score (0–1)	Key Factors (Media Volume, Correlation, Prominence, Relevance)	Explanation of Probability Score
2022-02-24	Russia's invasion of Ukraine & global energy crisis	0.95	Unprecedented global news coverage; clear temporal correlation with sentiment shifts 1; top-tier geopolitical prominence; directly linked to energy security and renewables push 1.	The outbreak of war dominated headlines worldwide and triggered an EU pivot to renewables for energy security 2. Studies of Twitter discourse confirm the conflict changed society's sentiments on green energy, introducing anxiety yet also boosting confidence in a faster clean transition 1. Given the vast media attention and the direct relevance of a fossil fuel crisis to renewable energy discussions, this event almost certainly had the greatest impact on sentiment (score ~0.95).
2022-05-18	EU adopts <b>REPowerEU</b> plan (cut  Russian fuel,  boost  renewables)	0.90	Extensive European and international coverage 3; timing aligns with sentiment uptick after war's start; high policy prominence in EU; very relevant – explicitly accelerates renewable rollout 4	The EU's €210 billion REPowerEU plan was widely reported as a historic shift to "quicken its transition to green energy" away from Russian fuels <sup>3</sup> . Media narratives highlighted its ambitious renewable targets, likely bolstering positive sentiment toward clean energy. Because of its significant press, direct tie-in with the crisis narrative, and focus on renewables, we assign a very high impact probability (~0.90).

Date (YYYY-MM- DD)	Event Name	Probability Score (0–1)	Key Factors (Media Volume, Correlation, Prominence, Relevance)	Explanation of Probability Score
2022-08-16	U.S. Inflation Reduction Act (major climate bill)	0.85	Widespread news coverage in US and abroad (largest US climate package 6); expected positive sentiment spike among climate advocates; major legislative prominence; strong relevance (hundreds of billions for clean energy).	Signing of the Inflation Reduction Act – "the biggest climate package in U.S. history" 6 – garnered massive media attention and optimism in clean-tech industries. Its \$369 billion in climate investments (e.g. for renewables and storage) prompted a wave of positive coverage, suggesting a strong boost to public sentiment on renewable energy. These factors justify a high impact score (~0.85) despite being somewhat region-specific.
2023-05-30	Solar > Oil investment tipping point (IEA report)	0.75	Significant global coverage by agencies and forums 7; indicative of shifting sentiment (renewables perceived as overtaking fossil fuels); symbolic prominence in energy economics; directly relevant to renewable vs fossil narrative.	The IEA's 2023 investment report revealed that solar power investment would, for the first time, exceed oil production investment that year 7. This symbolic milestone was reported by Reuters/WEF and celebrated in climate circles, likely boosting positive sentiment about renewables' momentum. Given moderate media pickup and its direct relevance to renewable energy optimism, we estimate a substantial impact on sentiment (probability ~0.75).

Date (YYYY-MM- DD)	Event Name	Probability Score (0–1)	Key Factors (Media Volume, Correlation, Prominence, Relevance)	Explanation of Probability Score
2023-12-12	cOP28 climate summit – pledge to triple renewables by 2030	0.80	High media volume in climate/news outlets  8 ; likely alignment with sentiment shifts (global commitment cheered by advocates); top-level international prominence; directly about scaling renewable energy worldwide.	At COP28 in Dubai, over 100 countries agreed to <b>triple global renewable energy capacity by 2030</b> 8 – a landmark decision widely covered as a climate breakthrough. This clear commitment to renewables in a major global forum likely galvanized public discourse and optimism on clean energy. The event's prominence and direct relevance to renewable targets warrant a high impact score (~0.80) despite some COP28 controversies.
2022-12-31	Global solar capacity <b>surpasses</b> <b>1 TW</b> (year- end milestone)	0.70	Notable industry and some mainstream coverage <sup>9</sup> ; correlates with celebratory sentiment in clean energy community; moderate prominence (milestone noted in reports); highly relevant as evidence of renewable growth.	In 2022, worldwide solar PV installations crossed the one-terawatt mark 9 - a milestone illustrating rapid clean energy expansion. This achievement, reported by renewable energy agencies and media, likely fostered positive sentiment by showcasing progress. While the news was slightly technical, its symbolic value for renewable energy adoption supports a moderately high impact score (~0.70).

Date (YYYY-MM- DD)	Event Name	Probability Score (0–1)	Key Factors (Media Volume, Correlation, Prominence, Relevance)	Explanation of Probability Score
2023-12-01	Global battery storage boom (record 2023 growth)	0.65	Growing media coverage in energy reports 10; timing aligns with increased public interest in grid reliability; moderate prominence (in specialized outlets); directly relevant by highlighting "energy storage" success.	Data released in late 2023 showed global battery storage capacity roughly doubled (↑ 120%) in 2023 10, reflecting unprecedented investment in energy storage. Such reports, while technical, have been picked up by industry news and signal that storage solutions are scaling rapidly – a positive development likely noted by analysts and enthusiasts. The moderate media visibility and clear relevance to "energy storage" sentiment justify an impact probability around 0.65.
2023-06-27	Texas heat wave – renewables & storage avert blackouts	0.60	Substantial U.S. news and social media discussion (heat crisis); anecdotal correlation with praise for batteries/ solar 11; regional prominence with global example value; highly relevant – demonstrates renewables/storage reliability in extreme conditions.	During the record Summer 2023 heat wave in Texas, electricity demand hit all-time highs, yet the grid stayed online "partly because of battery storage", delivering up to 2.5 GW – "like two nuclear plants[which] saved us from rolling blackouts" 11. This event, reported by outlets like Yale Climate Connections and Forbes, vividly showed renewables and storage in action, likely improving public perception of their value. Given its regional scope but strong illustrative impact, we assign a moderate probability (~0.60) that it influenced sentiment toward energy storage and renewable solutions.

1 Opinion Mining of Green Energy Sentiment: A Russia-Ukraine Conflict Analysis https://www.mdpi.com/2227-7390/10/14/2532

## <sup>2</sup> REPowerEU - 3 years on

https://energy.ec.europa.eu/topics/markets-and-consumers/actions-and-measures-energy-prices/repowereu-3-years\_en

3 4 5 EU unveils 210 bln euro plan to ditch Russian fossil fuels | Reuters

https://www.reuters.com/business/sustainable-business/eu-unveils-escape-route-russian-fossil-fuels-by-2027-2022-05-18/

6 Biden signs inflation act, hands pen to Manchin | Reuters

https://www.reuters.com/world/us/biden-signs-430-billion-climate-healthcare-tax-bill-2022-08-16/

7 Solar-power investment to exceed oil for the first time - IEA | World Economic Forum

https://www.weforum.org/stories/2023/05/solar-power-investment-exceed-oil-iea/

8 COP28 plan to triple renewables is doable, but not easy, companies say | Reuters

https://www.reuters.com/sustainability/climate-energy/cop28-plan-triple-renewables-is-doable-not-easy-companies-say-2023-12-12/

9 Global solar capacity passes one-terawatt mark | en:former

https://www.en-former.com/en/global-solar-capacity-passes-one-terawatt-mark/

10 Renewable Energy Systems and Infrastructure | Energy Storage

https://www.ren21.net/gsr-2024/modules/energy\_systems\_infrastructure/02\_energy\_storage/

11 Battery storage helped Texas power through summer heat » Yale Climate Connections

https://yaleclimateconnections.org/2023/11/battery-storage-helped-texas-power-through-summer-heat/