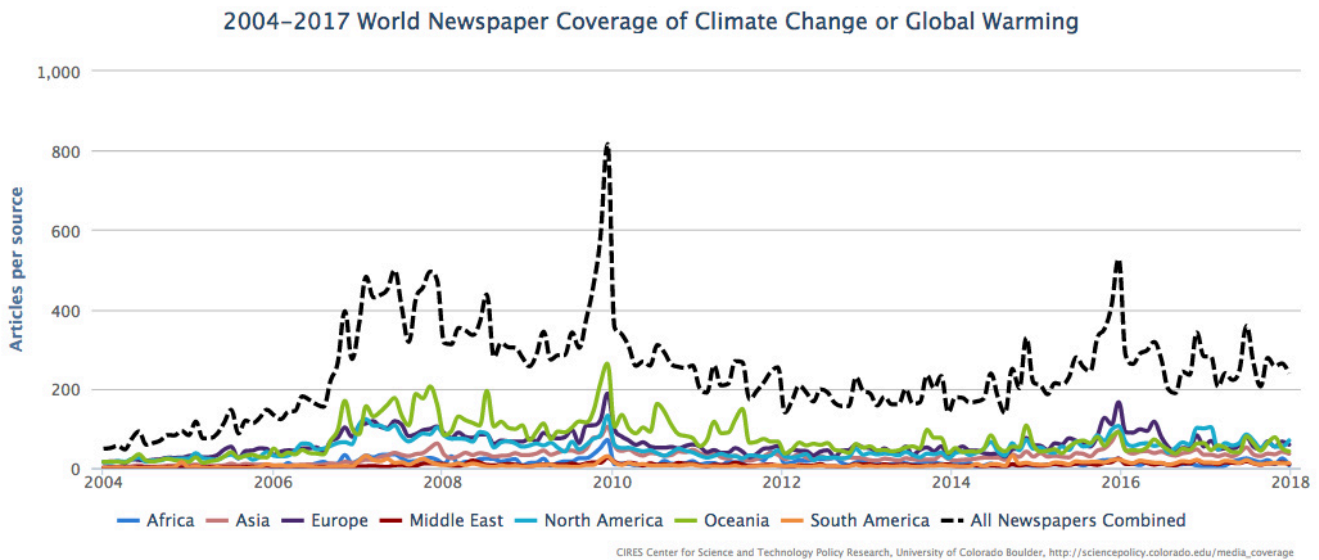


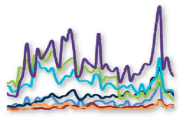
# Media and Climate Change Observatory (MeCCO)

December media attention to climate change and global warming was down slightly (7%) throughout the world from the previous month of November 2017. Increases were detected most strongly in North America, holding relatively steady in South America and with slight decreases in Asia, the Middle East, Africa, Oceania and Europe. Compared to counts from fifty-two sources across twenty-eight countries in seven regions around the world in December 2016 (a year ago), the global numbers were actually down about 12.5%. The high levels of coverage in December 2016 were largely attributed to the discussions of the ramifications of the US election of Donald J. Trump on climate change and global warming policy action and engagement in the coming year.

At the country level, coverage was generally down from the previous month of November 2017. This was the case in Germany (-38%), India (-15%), the United Kingdom (UK) (-4%), Australia (-16%), Canada (-6%) and New Zealand (-16%). The exception was the United States (US) where coverage was up 49% in December 2017 compared to the previous month. Figure 1 shows these ebbs and flows in media coverage – organized into seven geographical regions around the world – from January 2004 through December 2017.



**Figure 1:** Media coverage of climate change or global warming in fifty-two sources across twenty-eight countries in seven different regions around the world, from January 2004 through December 2017.



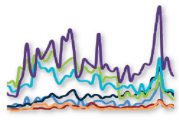
# Media and Climate Change Observatory (MeCCO)

Figure 2 shows word frequency data at the country levels in Canada, the USA, the UK and India in December 2017.



**Figure 2:** Word clouds showing frequency of words (4 letters or more) invoked in media coverage of climate change or global warming in Canada (top left), the United States (top right), the United Kingdom (bottom left) and India (bottom right) in December 2017.

The five representative US sources showed continuing signs of a ‘Trump Dump’ (where media attention that would have focused on other climate-related events and issues instead was placed on Trump-related actions (leaving many other stories untold)). This pattern of news reporting continued to be limited to the US context. For instance, in December, US news articles related to climate change or global warming, Trump was invoked 2757 times through the 417 stories this month (a ratio of 6.6 times per article on average) in *The Washington Post*, *The Wall Street Journal*, *The New York Times*, *USA Today*, and the *Los Angeles Times*. However, in contrast in the UK press, Trump was mentioned in the



# Media and Climate Change Observatory (MeCCO)

*Daily Mail & Mail on Sunday, Guardian & The Observer, The Sun, The Daily Telegraph & Sunday Telegraph, the Daily Mirror & Sunday Mirror, the Scotsman & Scotland on Sunday, and The Times & Sunday Times* 640 times in 543 December articles (a ratio of approximately 1.2 mentions per article on average).

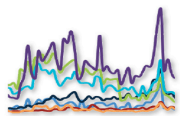
The US-based Trump Dump can be illustrated through media responses to the December 28 tweet from the President that referred to a cold snap in the Eastern half of the United States (approx. 1% of the Earth's surface) to cheekily call into question investments and action to confront climate change (Figure 3). This goading on social media garnered reports and responses in a number of sources. For examples, journalist Kendra Pierre-Louis from *The New York Times* reported that President Trump “appeared unaware of the distinction between weather and climate” in an article entitled “It’s Cold Outside. Cue the Trump Global Warming Tweet”.<sup>1</sup> Meanwhile, reporter Dino Grandoni from *The Washington Post* pointed out, “Before sending that message, Trump had not sent any tweet containing the phrase “climate change” or “global warming” since becoming president... In contrast, two years ago during the chilly winter of 2015, Trump sent off at least nine tweets holding up cold temperatures as evidence that global warming can’t be happening.”<sup>2</sup>



**Figure 3:** US President Donald J. Trump tweet from December 28, 2017 to close out the year.

<sup>1</sup> [https://www.nytimes.com/2017/12/28/climate/trump-tweet-global-warming.html?\\_r=0](https://www.nytimes.com/2017/12/28/climate/trump-tweet-global-warming.html?_r=0)

<sup>2</sup> [https://www.washingtonpost.com/news/energy-environment/wp/2017/12/28/after-chilly-forecast-trump-tweets-u-s-could-use-a-little-bit-of-that-good-old-global-warming/?utm\\_term=.b09233b2b57e](https://www.washingtonpost.com/news/energy-environment/wp/2017/12/28/after-chilly-forecast-trump-tweets-u-s-could-use-a-little-bit-of-that-good-old-global-warming/?utm_term=.b09233b2b57e)



# Media and Climate Change Observatory (MeCCO)

These stories were examples of attention paid primarily to *political* content of coverage during the month. Many other stories too took on primarily political dimensions of climate change or global warming. For other brief instances, three examples here can represent these trends in December. First, the ‘One Planet Summit’ hosted in Paris by French president Emmanuel Macron – two years following the Paris climate talks (COP21) and consequent Paris Agreement – generated media attention around the world. William Horobin from *The Wall Street Journal* reported on numerous private sector commitments made there by businesses, investment groups and government groups. In particular, French insurer AXA announced it would pull investments from coal and oils sands, while the World Bank revealed that it would no longer finance oil and gas exploration after 2019.<sup>3</sup> In addition, Angela Charlton and Sylvie Corbet of the Associated Press reported (in a piece published in *USA Today*) that fifty world leaders joined many business actors like Bill Gates and Elon Musk and celebrities like Arnold Schwarzenegger and Sean Penn to continue to press forward on climate commitments.<sup>4</sup> In addition, they reported on French President Emmanuel Macron’s announcement to award \$70,000,000 in grants to eighteen scientists to relocate to France to continue with research through the duration of the Trump Administration regime (one researcher – Joost de Gouw – has been part of the Cooperative Institute for Research in Environmental Sciences [CIRES] where MeCCO is also based; he is moving to the Université de Lyon).<sup>5</sup> Second, China’s announcement of plans for a national carbon emissions trading scheme focused on the power generation sector (producing approx. 40% of China’s CO<sub>2</sub> emissions and 15% of global CO<sub>2</sub> emissions) garnered significant coverage. Keith Bradsher and Lisa Friedman from *The New York Times* reported on how this policy intervention is projected to reduce CO<sub>2</sub> emissions approximately 27% by 2030 and will contribute to China’s peaking and then overall reduction in CO<sub>2</sub> emissions by 2030.<sup>6</sup> This news of the world’s largest carbon market in China came in stark contrast with concatenate policy retreat in the United States. Third, news of the US tax overhaul – signed by US President Donald Trump on December 22 – and its implications for climate and environment spawned significant attention, primarily in the US itself.<sup>7</sup> For example, Timothy Puko of *The Wall Street Journal* reported on the provision of the tax bill that will open up the Arctic National Wildlife Refuge (ANWR) to drilling-thirty oil and gas operations through lease sales and development in the area in the years to come.<sup>8</sup>

Media accounts also focused on primarily *scientific* dimensions of climate change and global warming. Four brief examples help represent stories across the month. First, climate impacts on flora and fauna

<sup>3</sup> <https://www.wsj.com/articles/investors-pledge-cuts-to-fossil-fuel-commitments-at-paris-meeting-1513117244>

<sup>4</sup> <https://www.usatoday.com/story/news/world/2017/12/12/paris-climate-summit/943389001/>

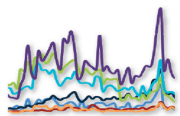
<sup>5</sup> <https://www.univ-lyon1.fr/actualites/make-our-planet-great-again-seminaire-du-pr-joost-de-gouw-a-lyon-928482.kjsp>

<sup>6</sup> <https://www.nytimes.com/2017/12/19/climate/china-carbon-market-climate-change-emissions.html>

<sup>7</sup> <https://law.stanford.edu/2017/12/20/the-tax-bill-climate-change-and-anwr/>

<sup>8</sup> <https://www.wsj.com/articles/oil-glut-makes-alaska-reserves-less-attractive-to-drillers-1513765801>





# Media and Climate Change Observatory (MeCCO)



University of Colorado Boulder

ISSUE 12, DECEMBER 2017

continued to pervade overall coverage. For example, Damian Carrington from *The Guardian* covered a new report's findings that climate change is affecting bird migration and reproduction patterns. The Royal Society for the Protection of Birds noted that temperature increases into 2017 have endangered several species while some warmer-weather species are now arriving in the UK for the first time.<sup>9</sup> Second, the science of economics new research sparked coverage in December. A December 7<sup>th</sup> article by Energy Editor Andrew Ward in the *Financial Times* pointed to the profit losses forecasted for coal-fired power plants in Europe in the coming years. He wrote that the analysis from Carbon Tracker found that 97% of plants are forecasted to operate at losses by 2030 due to a mix of climate and environment as well as political economic factors.<sup>10</sup> This was one of over one hundred media accounts relating to this study, and was among a wider range of coverage of the economics of climate change in December. Third, research into climate change interactions with renewables generated coverage in Decembers. For example, new research by Dr. Kristopher Karnauskas (also part of CIRES where MeCCO is based) and colleagues in the journal *Nature Geoscience* found that changing wind patterns due to a changing climate will reduce wind power generation by 17% in the US Heartland and a 10% drop in Britain by 2100. Journalist Chris Mooney from *The Washington Post* pointed to not-so-simple tradeoffs associated with these reductions on baseline wind energy resources in the US and UK in contrast with forecasts of increasing wind power in some Southern Hemisphere locations.<sup>11</sup> Fourth, many scientific studies continued to report on climate change trends at the Earth's poles. For example, Seth Borenstein from the *Associated Press* wrote about the 'Arctic Report card' released by the National Oceanic and Atmospheric Administration noting more rapidly melting permafrost than previous years and a rate of unparalleled sea ice decline in the last fifteen centuries.<sup>12</sup>

Across the globe in December there were a range of stories that intersected with the *cultural* arena. For example, stories focused on the #WeAreStillIn movement which continue with commitments of the Paris Agreement even in the absence of US Federal Government participation. A story by Amer Madhani from the *USA Today* articulated the December 3<sup>rd</sup> signing of the 'Chicago Climate Charter' as part of a movement of now 388 mayors of US cities representing 68 million US residents committed to Paris Agreement reductions goals. At that particular meeting, fifty mayors signed on to this charter that additionally noted the importance of bringing in voices from marginalized communities like racial and ethnic minorities as well as city residents living in poverty in order to strengthen a coordinated effort to effectively confront 21<sup>st</sup> century climate change.<sup>13</sup> As another brief example, stories in December

<sup>9</sup> <https://www.theguardian.com/environment/2017/dec/05/climate-change-is-radically-reshuffling-uk-bird-species-report-finds>

<sup>10</sup> <https://www.ft.com/content/f32c3caa-daf3-11e7-a039-c64b1c09b482>

<sup>11</sup> [https://www.washingtonpost.com/news/energy-environment/wp/2017/12/11/wind-energy-is-supposed-to-fight-climate-change-but-climate-change-is-fighting-back/?utm\\_term=.2e5c7226230b](https://www.washingtonpost.com/news/energy-environment/wp/2017/12/11/wind-energy-is-supposed-to-fight-climate-change-but-climate-change-is-fighting-back/?utm_term=.2e5c7226230b)

<sup>12</sup> <https://apnews.com/a58aeed6000243fc80b41957579c1db1/Arctic-report-card:-Permafrost-thawing-at-a-faster-pace>

<sup>13</sup> <https://www.usatoday.com/story/news/2017/12/04/u-s-mayors-sign-pact-track-progress-paris-agreement/920305001/>

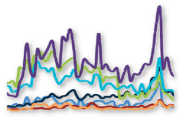


Office for Outreach and Engagement  
UNIVERSITY OF COLORADO BOULDER



CENTER & FOR  
SCIENCE & TECHNOLOGY  
POLICY RESEARCH





# Media and Climate Change Observatory (MeCCO)



University of Colorado Boulder

ISSUE 12, DECEMBER 2017

continued to focus as well on climate refugees across the globe. Fiona Harvey from *The Guardian* reported on new research from the journal *Science* that found that asylum applications since 2000 to the European Union have increased when extreme weather events or crop-growing challenges associated with temperature and precipitation plagued origin countries. Harvey noted that the study conclude that applications are forecasted to continue to increase with rising temperatures, increased floods and droughts as well as extreme weather events associated with climate change.<sup>14</sup>

In December, coverage relating primarily to *ecological* and *meteorological* issues also grabbed attention. There were a number of stories about extreme weather events around the world. For example, many stories from the *Los Angeles Times* and elsewhere covered the unfolding and unprecedented December tragedies.<sup>15</sup> As California governor Jerry Brown called a state of emergency in Ventura County,<sup>16</sup> many discussed this as a possible sign of a ‘new normal’ as it related to climate change. On December 31<sup>st</sup>, *Los Angeles Times* journalist Joe Mozingo reported that the Thomas Fire that ignited December 4<sup>th</sup> in Southern California became the largest by size in the state since modern recordkeeping began (having burned over 281,900 acres) by the end of the 2017.<sup>17</sup> On December 30<sup>th</sup>, *Incident Command* in Los Padres National Forest determined that the fire was 92% contained and that they did not anticipate full containment until approximately January 21, 2018.<sup>18</sup> As another example, a special collection of research from the *Bulletin of the American Meteorological Society* interrogated links between extreme events and climate change in 2016. Brad Plumer and Nadja Popovich from *The New York Times* reported that study authors found that climate change was a “significant driver” in 21 of 27 events examined around the world. Plumer and Popovich also reported that five of these events = record temperatures around the world, coral bleaching in the Great Barrier Reef, drought in Africa, a patch of warm water over the Pacific Ocean and wildfires in North America = were determined to be most likely due to global warming.<sup>19</sup>

And with all that, 2017 has come to a close. While the World Meteorological Organization, NASA and NOAA as well as the UK Met Office all forecast that 2017 will have been the second or third warmest year on record (after 2016 and possibly 2015),<sup>20, 21</sup> we still look to 2018 with great optimism. Happy New Year!

- **report prepared by Max Boykoff, Jennifer Katzung and Ami Nacu-Schmidt**

<sup>14</sup> <https://www.theguardian.com/environment/2017/dec/21/devastating-climate-change-could-see-one-million-migrants-a-year-entering-eu-by-2100>

<sup>15</sup> <http://www.latimes.com/local/lanow/la-me-thomas-fire-santa-barbara-fire-20171210-story.html>

<sup>16</sup> <http://www.latimes.com/local/lanow/la-me-ln-socal-wildfires-main-20171206-story.html>

<sup>17</sup> <http://www.latimes.com/local/california/la-me-epic-fires-california-20171231-story.html>

<sup>18</sup> <https://inciweb.nwcg.gov/incident/article/5670/42416/>

<sup>19</sup> <https://www.nytimes.com/2017/12/14/climate/climate-extreme-weather-attribution.html>

<sup>20</sup> <https://www.reuters.com/article/us-global-weather/global-temperature-to-rise-next-year-but-no-new-record-uk-met-office-idUSKBN1EF1CX>

<sup>21</sup> <http://mashable.com/2017/12/19/top-5-hottest-years-global-warming-nasa-noaa/#.Gypoylacmq5>



Office for Outreach and Engagement  
UNIVERSITY OF COLORADO BOULDER



CENTER & FOR  
SCIENCE & TECHNOLOGY  
POLICY RESEARCH

