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"Nothing cool about it"



Iraqis buy ice blocks at a factory in Sadr City, east of the capital, Baghdad, on July 2 amid power outages and soaring temperatures. Photo: Ahmad Al-Rubaye/AFP via Getty Images.

ugust media attention to climate change or global warming in newspapers around the globe increased 6.5% from the previous month of July. August 2021 global radio coverage of climate change or global warming increased 53% from July 2021, while coverage in international wire services increased 9.5% from the previous month. Media attention to climate change or global warming in August 2021 was the highest levels of coverage

over nearly 12 years; the highest levels were recorded in December 2009 when attention was paid to the United Nations (UN) Conference of Parties (COP) climate talks that were held in Copenhagen, Denmark, shortly after the University of East Anglia email hacking scandal. Figure 1 shows trends in newspaper media coverage at the global scale - organized into seven geographical regions around the world - from January 2004 through August 2021.

2004-2021 World Newspaper Coverage of Climate Change or Global Warming

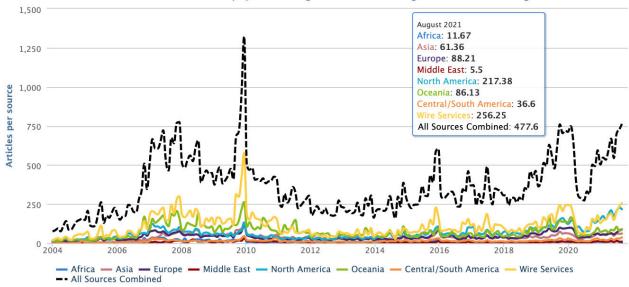


Figure 1. Newspaper media coverage of climate change or global warming in print sources in seven different regions around the world, from January 2004 through August 2021.





Regionally, compared to the previous month coverage was up in Asia (+3%), Oceania (+9%), Europe (+10%), Latin America (+23%), and across Africa (+52%), but was down in North America (-4%), and the Middle East (-45%). Figure 2 shows trends in newspaper media coverage across Latin America from January 2004 through August 2021.

At the country level, United States (US) print coverage was down 0.2% while US television coverage also decreased 10% from the previous month. Meanwhile, compared to the previous month coverage dropped in Spain (-3%), Canada (-7.5%), Japan (-17%), Finland (-27%), Germany (-27%), New Zealand (-30%), Russia (-62%), while coverage increased in India (+21%), the United Kingdom (UK) (+32%), Norway (+35%), Australia (+39%), Sweden (+45%), and Denmark (+52%) in August 2021.

Like the preceding months (summer in the Northern Hemisphere), August media accounts about climate change or global warming were dominated by *ecological* and *meteorological* stories. The month began with news that the preceding month - July 2021 - was the hottest month on Earth in the 142 years of record keeping. To illustrate, "July was the world's hottest month ever recorded, US government

scientists have confirmed, a further indication of the unfolding climate crisis that is now affecting almost every part of the planet. The global land and ocean surface temperature last month was one degree Celsius, 0.9C (1.6F), hotter than the 20th-century average of 15.8C (60.4F), making it the hottest month since modern record keeping began 142 years ago". Meanwhile, US *National Public Radio* correspondent Joe Hernandez noted, "There was nothing cool about it. July was the hottest month ever recorded in human history, according to new data from the National Oceanic and Atmospheric Administration".

Also, in August, a spate of extreme events linked to climate change garnered several media accounts connecting wildfires, floods and droughts around the globe. For example, US National Public Radio journalist Rachel Treisman interviewed Lauren Sommer and Rebecca Hersher from NPR's climate team and asked about flood events and their connection to climate change. They responded, "It's been a wild few weeks for flash flood disasters, from Central China to western Europe to Mumbai to Arizona. These fast-moving waters have killed hundreds of people, but they're not a surprise to climate scientists, who have been sounding the alarms for years. Even though these floods happened around their world, their root

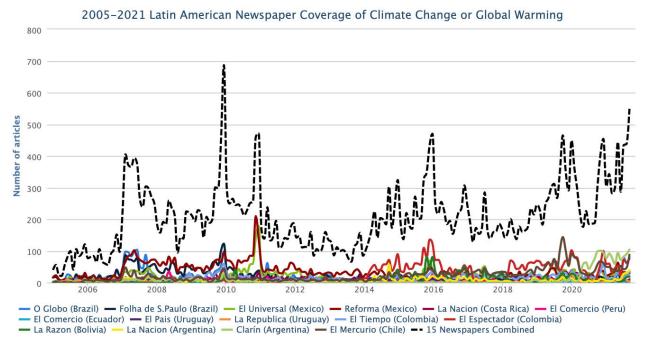


Figure 2. Newspaper media coverage of climate change or global warming in print sources across Latin America, from January 2004 through August 2021.

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cause was the same: extreme rain. And it's getting more common as the Earth gets warmer (hot air + hot water = more moisture in the air). Plus, as the planet heats up, some climate models show winds in the upper atmosphere slowing down in certain places, which would mean that extreme weather would linger there longer". As a second example, Associated Press correspondents Seth Borenstein and Frank Jordans noted, "As the world staggers through another summer of extreme weather, experts are noticing something different: 2021's onslaught is hitting harder and in places that have been spared global warming's wrath in the past. Wealthy countries such as the United States, Canada, Germany and Belgium are joining poorer and more vulnerable nations on a growing list of extreme weather events that scientists say have some connection to humancaused climate change" (see Figure 3).

Furthermore, the official death toll from climate change-connected one-in-1,000 years flooding in China's Henan province in June increased to over 300 in reporting in early July. For example, New York Times correspondent Austin Ramzy observed, "The number of people who died in recent floods in central China has increased dramatically to 302, officials said on Monday, more than tripling the previously reported total and raising questions about the full scale of the disaster... Flooding is a complex phenomenon with many causes, including land development and ground conditions. While linking climate change to a single flood event requires extensive scientific analysis, climate change, which is already causing heavier rainfall in many storms, is an increasingly important part of the mix. Warmer atmosphere holds, and releases, more water, whether in the form of rain or heavy winter snowpack".

Meanwhile, Siberian wildfires garnered media attention as stories associated these fires with a changing climate. For example, *Washington Post* journalist Robyn Dixon reported, "For Russia, there are two types of fires raging across



Figure 3. An Associated Press story by Seth Borenstein and Frank Jordans (appearing in The Boulder Daily Camera) reflecting on the many 2021 extreme events and connections with a changing climate.

Siberia: the kind the authorities are fighting and the others they are allowing to burn. That's because Siberia is so vast that huge fires can burn without threatening any major settlements, transportation systems or infrastructure – but are still part of a swath of infernos that together are larger than all the other blazes around the world. On one level, the Siberian fires are part of an annual cycle. But many climate experts see the staggering scope of this year's fires as another sign of greater fire risks on a warming planet that is potentially being made even hotter by huge carbon emissions from the blazes".

This was also the case in August with wildfires in Turkey, Greece and Algeria. For example, Associated Press correspondents Thanassis Stavrakis, Nicholas Paphitis and Suzan Fraser reported, "Thousands of people have fled wildfires that are burning out of control in Greece and Turkey, including a large blaze just north of Athens that left one person dead, as a protracted heatwave turned forests into tinderboxes and flames threatened populated areas, electricity installations and historical sites. Turkey's wildfires, described as the worst in decades, have swept through swathes of the southern coast for the past 10 days, killing eight people. In Greece, firefighters were battling 56





active wildfires on Friday, Civil Protection chief Nikos Hardalias said. Multiple evacuation orders were issued for inhabited areas of the mainland and the nearby island of Evia, while the fire near Athens burned forests and houses in its path heading toward Lake Marathon, the capital's main water reservoir... Greek and European officials have blamed the climate crisis for the multiple fires burning through swaths of southern Europe, from southern Italy to the Balkans, Greece and Turkey. Massive fires have been burning across Siberia in the north of Russia for weeks, while hot, bone-dry, gusty weather has also fueled devastating wildfires in California, destroying whole towns in some cases". As another example, El País journalists A. Naya Mercadal and C. Álvarez reported "Fires devour the eastern Mediterranean fueled by extreme heat. The exceptional high temperatures, with records of 47.1 degrees in the north of Greece, multiply the fires in the countries of the area. "It is a new normal that we are going to see with climate change", warns an expert". The Copernicus Emergency Management Service showed through satellite observation the existence of numerous active fires in Greece, Turkey, Italy, Albania, North Macedonia and the countries of North Africa". As a third illustration, The Associated Press reported, "At least 25 soldiers died saving residents from wildfires ravaging mountain forests and villages east of Algeria's capital...Climate scientists say there is little doubt climate change from the burning of coal, oil and natural gas is driving extreme events, such as heat waves, droughts, wildfires, floods and storms. A worsening drought and heat - both linked to climate change - are driving wildfires in the U.S. West and Russia's northern region of Siberia. Extreme heat is also fueling the massive fires in Greece and Turkey".

Other extreme events in August - torrential rains, hurricane and floods - garnered media attention as they were connected with climate change and global warming. For example, tropical depression Grace in the Caribbean basin with its impacts on Haiti and the Dominican Republic in early August generated news attention. To illustrate, *New York Times* reporters Alyssa Lukpat, Jesus Jiménez, Neil Vigdor, Maria Abi-Habib and Andre Paulte

wrote, "Grace, which made landfall in Haiti on Monday as a tropical depression, restrengthened into a tropical storm early Tuesday morning, the National Hurricane Center said. The storm's heavy rains brought the potential for mudslides and flooding that could hamper recovery efforts from a 7.2-magnitude earthquake that struck the country three days earlier. Several inches of rain could complicate search-and-rescue efforts after the earthquake collapsed thousands of homes and made some roads and bridges impassable... The links between hurricanes and climate change are becoming more apparent. A warming planet can expect to see stronger hurricanes over time, and a higher incidence of the most powerful storms - though the overall number of storms could drop, because factors like stronger wind shear could keep weaker storms from forming. Hurricanes are also becoming wetter because of more water vapor in the warmer atmosphere; scientists have suggested storms like Hurricane Harvey in 2017 produced far more rain than they would have without the human effects on climate. Also, rising sea levels are contributing to higher storm surge - the most destructive element of tropical cyclones. A major United Nations climate report released in August warned that nations have delayed curbing their fossil-fuel emissions for so long that they can no longer stop global warming from intensifying over the next 30 years, leading to more frequent life-threatening heat waves and severe droughts. Tropical cyclones have likely become more intense over the past 40 years, the report said, a shift that cannot be explained by natural variability alone".

As a second example, severe flooding in the Black Sea coast of Turkey generated media accounts. To illustrate, *Associated Press* correspondent Suzan Fraser noted, "The death toll from floods and mudslides in northern Turkey rose to at least 38 on Friday, officials said, as emergency crews searched collapsed buildings, swamped homes, and submerged basements for more victims and survivors. An opposition politician said more than 300 people may be unaccounted for... Scientists say there is little doubt that climate change from the burning of coal, oil and natural gas is driving more extreme events, such as heat waves, droughts, wildfires, floods and storms.





Such calamities are expected to happen more frequently as the planet warms". Meanwhile, *El País* journalist Andrés Mourenza noted "Experts attribute these extreme phenomena, such as the heat wave on the Mediterranean coast that has led to huge fires and the torrential rains on the north coast, to climate change, one of the consequences of which is that these events are reproduced with greater frequency and intensity".

A third example was US and international media coverage of Hurricane Ida that struck the US Gulf Coast and traveled through the US East up through New York. For instance, New York Times journalist Henry Fountain reported, "Hurricane Ida, which struck the Louisiana coast on Sunday with winds of 150 miles an hour, gained power faster more than most storms. Because of climate change, such rapid strengthening is happening more often as hurricanes pick up more energy from ocean water that is warmer than before. But in a summer of extreme weather, Ida's intensification was extreme. According to the National Hurricane Center's forecast bulletins, the storm's maximum sustained winds as of Saturday morning were about 85 m.p.h., making it a Category 1 hurricane. Less than 24 hours later they were 65 m.p.h. stronger, bringing Ida close to a Category 5. The storm intensified more than the hurricane center's forecast, which had called for maximum winds reaching 140 m.p.h. The hurricane center's definition of rapid intensification is at least a 35-m.p.h. increase in wind speed in 24 hours. Ida strengthened that much in just six hours overnight. Climate change is part of the reason. Researchers have found that the frequency of rapidly intensifying Atlantic hurricanes has increased over the past four decades as ocean temperatures have risen, in large part because warmer water provides more of the energy that fuels these storms. In the 1980s, there was about a 1 percent chance that a hurricane would undergo rapid intensification. Now, there's a 5 percent chance".

Many climate change or global warming stories in August also continued to focus on *scientific* themes. Among them, *NBC News* journalist Denise Chow reported on new research in the journal *Nature Communications* finding human's

influence on contemporary climate change. She wrote, "For decades, Earth's energy system has been out of whack. Stability in Earth's climate hinges on a delicate balance between the amount of energy the planet absorbs from the sun and the amount of energy Earth emits back into space. But that equilibrium has been thrown off in recent years - and the imbalance is growing, according to a paper published Wednesday in the journal Nature Communications. The changes to Earth's energy system have major ramifications for the planet's future climate and humanity's understanding of climate change. The Princeton University researchers behind the paper found that there's a less than 1 percent probability that the changes occurred naturally. The findings undercut a key argument used by people who do not believe human activity is responsible for the bulk of climate change to explain trends in global warming, demonstrating that the planet's energy imbalance cannot be explained just by Earth's own natural variations. The research also offers important insights into how greenhouse gas emissions and other consequences of human-caused climate change are upsetting the planet's equilibrium and driving global warming, sea-level rise and extreme weather events". Meanwhile, New York Times journalist John Schwartz reported, "What is the cost of our carbon footprint - not just in dollars, but in lives? According to a paper published on Thursday, it is soberingly high, and perhaps high enough to help shift attitudes about how much we should spend on fighting climate change. The new paper, published in the journal Nature Communications, draws on multiple areas of research to find out how many future lives will be lost as a result of rising temperatures if humanity keeps producing greenhouse gas emissions at high rates - and how many lives could be saved by cutting those emissions. Most of the deaths will occur in regions that tend to be hotter and poorer than the United States. These areas are typically less responsible for global emissions but more heavily affected by the resulting climate disasters".

In August, new research in *Nature* found that tens of millions of people across planet Earth have been moving into flood zones just as





climate change increases risks in these places. For example, BBC reporter Matt McGrath noted, "Satellite images were used to document the rise, which is far greater than had been predicted by computer models. The analysis shows that migration and a growing number of flood events are behind the rapid increase. By 2030, millions more will experience increased flooding due to climate and demographic change, the authors say". Meanwhile, CNN journalist Rachel Ramirez reported, "Amid a deadly summer of flooding in different parts of the world, scientists have found the number of people at risk to extreme flooding has grown significantly in the past two decades. In Germany, severe flooding claimed the lives of at least 173 people. In Nigeria, Lagos Island experienced one of its worst floods in recent years, submerging cars and houses. And, earlier this week, officials announced that the death toll from China's July floods had climbed to 302 -more than triple the previous estimate. Climate change is making extreme flooding worse, and a study published Wednesday in the journal Nature concluded the population exposed to those floods since 2000 is 10 times higher than previous estimates, as more people migrate into flood-prone areas".

Further into August, new research published in Nature Climate Change published in found that the Atlantic Meridional Overturning Circulation (AMOC) was being destabilized by climate change. Media covered this new set of AMOC findings as they related to the Gulf Stream and other associated atmosphere-ocean circulations. For example, Washington Post correspondent Sarah Kaplan reported, "Human-caused warming has led to an "almost complete loss of stability" in the system that drives Atlantic Ocean currents, a new study has found - raising the worrying prospect that this critical aquatic "conveyor belt" could be close to collapse. In recent years, scientists have warned about a weakening of the Atlantic Meridional Overturning Circulation (AMOC), which transports warm, salty water from the tropics to northern Europe and then sends colder water back south along the ocean floor. Researchers who study ancient climate change have also uncovered evidence that the AMOC can turn off abruptly, causing wild temperature swings and other dramatic shifts in global weather systems. Scientists haven't directly observed the AMOC slowing down. But the new analysis, published Thursday in the journal Nature Climate Change, draws on more than a century of ocean temperature and salinity data to show significant changes in eight indirect measures of the circulation's strength. These indicators suggest that the AMOC is running out of steam, making it more susceptible to disruptions that might knock it out of equilibrium, said study author Niklas Boers, a researcher at the Potsdam Institute for Climate Impact Research in Germany. If the circulation shuts down, it could bring extreme cold to Europe and parts of North America, raise sea levels along the U.S. East Coast and disrupt seasonal monsoons that provide water to much of the world". Furthermore, USA Today journalist Doyle Rice noted, "A large system of ocean currents in the Atlantic - which includes the Gulf Stream - has been disrupted due to human-caused climate change, scientists reported in a new study published Thursday. If that system collapses, it would lead to dramatic changes in worldwide weather patterns. The Atlantic Meridional Overturning Circulation, or AMOC, transports warm, salty water from the tropics northward at the ocean surface and cold water southward at the ocean bottom".

Yet the overwhelming majority of scientificrelated climate change coverage was devoted to the release of the UN Intergovernmental Panel on Climate Change (IPCC) assessment report from the first working group. For example, CNN journalists Angela Fritz and Rachel Ramirez reported, "As the world battles historic droughts, landscape-altering wildfires and deadly floods, a landmark report from global scientists says the window is rapidly closing to cut our reliance on fossil fuels and avoid catastrophic changes that would transform life as we know it. The stateof-the-science report from the United Nations' Intergovernmental Panel on Climate Change says the world has rapidly warmed 1.1 degrees Celsius higher than pre-industrial levels, and is now careening toward 1.5 degrees - a critical threshold that world leaders agreed warming should remain below to avoid worsening impacts. Only by making deep cuts to greenhouse gas

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Figure 4. Front pages of newspapers around the world covering the UN IPCC release of the Sixth Assessment report of WG1 in the August 10, 2021 print editions.

emissions, while also removing carbon dioxide from the atmosphere, can we halt the precipitous trend". As a second example among many, Guardian environment correspondent Fiona Harvey noted, "Human activity is changing the Earth's climate in ways "unprecedented" in thousands or hundreds of thousands of years, with some of the changes now inevitable and "irreversible", climate scientists have warned. Within the next two decades, temperatures are likely to rise by more than 1.5 Cabove pre-industrial levels, breaching the ambition of the 2015 Paris climate agreement, and bringing widespread devastation and extreme weather. Only rapid and drastic reductions in greenhouse gases in this decade can prevent such climate breakdown, with every fraction of a degree of further heating likely to compound the accelerating effects, according to the Intergovernmental Panel on Climate Change, the world's leading authority on climate science". Figure 4 captures many front

pages around the world as print outlets covered this IPCC WG1 release.

As a final example of scientific-themed stories in August relating to climate change, a new attribution study examined the July flooding in Germany and Belgium and found that climate change made the rare event as much as nine times more likely. Media portrayals addresses this research. For example, Associated Press correspondent Frank Jordans reported, "Scientists say that global warming makes the kind of extreme rainfall that caused deadly flash flooding in western Europe last month more likely, though it remains unclear exactly how much. At least 220 people died in Germany and Belgium on July 14-15 when swollen streams turned into raging rivers, sweeping away houses, roads and bridges, and causing billions of euros (dollars) in damage. A study released Tuesday by the World Weather Attribution group used historical records and computer simulations





to examine how temperatures affected rainfall from the late 19th century to the present. While the study hasn't been assessed by independent scientists yet, its authors use widely accepted methods to conduct rapid assessments of specific weather events such as floods, droughts and heat waves. It found that across a large strip of western Europe - stretching from the Netherlands to Switzerland - the amount of rainfall in a single day increased by 3% to 19% over the period, during which global temperatures increased by 1.2 degrees Celsius (2.2 degrees Fahrenheit). Experts say that for every 1 degree Celsius (1.8 F) the planet warms, the air can absorb 7% more water. When that water is released, it causes more extreme rainfall. The study, conducted by almost 40 researchers from six European countries and the United States, calculated that downpours of the kind that caused last month's floods are now 1.2 to 9 times more likely – and this will increase further if the planet continues to heat up".

In August, several prominent political and economic themed media stories about climate change or global warming circulated in the public sphere. For example, ongoing anticipation of the November UN COP climate talks in Glasgow, Scotland generated several media stories. For example, Daily Mail journalist Martin Beckford reported, "Britain's climate tsar was accused of hypocrisy last night for flying to at least 30 countries - and not isolating afterwards. Alok Sharma has travelled tens of thousands of miles over the past seven months to prepare the ground for the COP26 global environment summit this autumn. But despite visiting at least six countries on the travel 'red list', he has been given a ministerial exemption from hotel quarantine each time. He has also been able to avoid having to isolate at home following 'amber list' trips. Ordinary travellers face fines of up to £10,000 for breaking travel quarantine rules". Meanwhile, Guardian reporter Miranda Bryant wrote, "Alok Sharma, the government minister responsible for vital UN climate talks, has been accused of undermining environmental efforts and failing to set an example after reports that he has flown to 30 countries in the past seven months. The president of Cop26, which is being hosted in Glasgow in October and November, has visited countries including Brazil, Indonesia and Kenya since February.

Meanwhile, Alok Sharma's comments sparked many other stories on climate change in August. For example, Guardian journalist Fiona Harvey reported, "The world will soon face "catastrophe" from climate breakdown if urgent action is not taken, the British president of vital UN climate talks has warned. Alok Sharma, the UK minister in charge of the Cop26 talks to be held in Glasgow this November, told the Observer that the consequences of failure would be "catastrophic": "I don't think there's any other word for it. You're seeing on a daily basis what is happening across the world. Last year was the hottest on record, the last decade the hottest decade on record." But Sharma also insisted the UK could carry on with fossil-fuel projects, in the face of mounting criticism of plans to license new oil and gas fields. He defended the government's record on plans to reach net zero emissions by 2050, which have been heavily criticised by the UK's independent Committee on Climate Change, and dismissed controversies over his travel schedule".

Finally, many *cultural* stories continued to drive coverage related to climate change or global warming in August. For example, UNICEF announced that half the planet's 2.2 billion children are a 'extremely high risk' from climate change and associated pollution. This grabbed media attention. For example, Times (of London) Environment Editor Ben Webster wrote, "Children living in 33 countries face a "deadly combination" of exposure to multiple climate and environmental factors and inadequate essential services such as water, healthcare and education. The Children's Climate Risk Index by UNICEF, the UN children's agency, is the first comprehensive analysis of the dangers. It ranks countries based on children's exposure to climate and environmental shocks, such as cyclones and heatwaves, as well as their vulnerability to those shocks based on their access to essential services". Also, Guardian journalist Damien Carrington reported, "Almost half the world's 2.2 billion children are already at "extremely high risk" from the impacts of the climate crisis and pollution, according to a report from UNICEF. The UN agency's head called the

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Figure 5. Examples of Japanese print media stories on the closing of the summer Olympics (August 8-9) and connections with a changing climate.

situation "unimaginably dire". Nearly every child around the world was at risk from at least one of these impacts today, including heatwaves, floods, cyclones, disease, drought, and air pollution, the report said. But 1 billion children live in 33 countries facing three or four impacts simultaneously. The countries include India, Nigeria and the Philippines, and much of sub-Saharan Africa. The report is the first to combine high-resolution maps of climate and environmental impacts with maps of child vulnerability, such as poverty and access to clean water, healthcare and education".

Also in August, the impacts of Brazilian President Jair Bolsonaro's actions as they related to climate change generated media interest. For example, *El País* journalist Naiara Galarraga Gortázar wrote "Jair Bolsonaro is the first president in the last 35 years in Brazil who has not created a single indigenous land or an ecological reserve. He has not marked a single centimeter since he took possession. It is not a surprise because he

promised to do so in the campaign and it has been his position for decades, but it is a decision that directly harms native peoples, encourages the invasion of lands by white people and even hampers efforts to contain the deforestation and global warming".

As a final cultural example, many headlines and stories in Japan in August discussed climate change and the closing of the Tokyo Olympics. Stories in *Asahi Shimbun* and *Mainichi Shimbun* illustrate these accounts. Figure 5 shows front pages in Japan print media of these stories.

Thanks for your ongoing interest in our Media and Climate Change Observatory (MeCCO) work monitoring media coverage of these intersecting dimensions and themes associated with climate change and global warming.

~ report prepared by Max Boykoff, Midori, Aoyagi, Rogelio Fernández-Reyes, Ami Nacu-Schmidt and Olivia Pearman

Thank you for your ongoing interest in the work we do through MeCCO. We remain committed to our work monitoring media coverage of these intersecting dimensions and themes associated with climate change.

Our ongoing work is dependent on financial support so please consider contributing:

https://giving.cu.edu/fund/media-and-climate-change-observatory-mecco



MONTHLY SUMMARIES

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MeCCO monitors 127 sources (across newspapers, radio and TV) in 59 countries in seven different regions around the world. MeCCO assembles the data by accessing archives through the Nexis Uni, Proquest and Factiva databases via the University of Colorado libraries. These sources are selected through a decision processes involving weighting of three main factors:



Geographical Diversity

favoring a greater geographical range



Circulation

favoring higher circulating publications



Reliable Access to Archives Over Time

favoring those accessible consistently for longer periods of time

Media and Climate Change Observatory, University of Colorado Boulder http://mecco.colorado.edu