

DWR Climate News Digest

September 2015

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The information provided herein is a selected compilation of recent popular news articles, publications, and other information relevant to climate change and water management. The links provided herein are intended to provide educational and thought-provoking material for water managers and water users.

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TOPICS [Find older items in the [Climate News Archive](#)]

DWR Staff Publications

[California Climate Science and Data for Water Resources Management](#)

[DWR Climate Program – June 2015]

Published Literature

[The climate change consensus extends beyond climate scientists](#)

[Environmental Research Letters – September 24, 2015]

Agriculture/Food Production

[This growing migration crisis is the canary in the mine on climate change](#)

[The Guardian – September 21, 2015] (*“Conflict in the Middle East forces people to flee, but so does drought, destroying crops and livelihood”*)

General Water Management

[Linking up water issues and climate change](#) [Sci Dev Net – September 15, 2015]

Water & Energy Nexus

[Climate change threatens electric grid reliability in the Southeast](#)

[Center for American Progress – September 15, 2015]

Sea-level Rise and other Ocean Impacts

WWF: World's richest reef system could soon succumb to climate change

[The Guardian – September 24, 2015] (*“Coral reef cover has declined by 50% in the last 30 years and reefs could disappear by as early as 2050...if current rates of ocean warming and acidification continue”*)

Carbon storage and ice melt: Marine organisms combat climate change in Antarctica?

[Nature World News – September 21, 2015] (*“As sea ice is lost to a warming climate, bottom-dwellers are flourishing and storing an unexpected amount of carbon”*)

Ocean acidification weighing heavily upon marine algae [Science Daily – September 8, 2015]

Extreme Weather Events

New York City flood risk rising due to climate change [USA Today – September 28, 2015]

Dramatic increase in concurrent droughts, heat waves [Science Daily – September 1, 2015]

Human Health Impacts

New program on climate change and health at Yale School of Public Health

[Yale News – September 22, 2015]

Tribal Impacts & Traditional Ecological Knowledge

Learning from indigenous peoples on climate change

[National Geographic – September 2014] (*“It’s not about forgetting what science has to offer, it’s about using the best of what their cultures and our culture have created”*)

Fires, drought, melting glaciers: Tribal climate experts hope we haven’t passed the tipping point [Indian Country Today – August 24, 2015]

Wildlife and Ecosystem Impacts

Shark culling could indirectly accelerate climate change, study warns

[The Guardian – September 28, 2015] (*“Once you remove large ocean predators you get strange indirect impacts, there is a meltdown in the ecosystem that influences the release of carbon”*)

Warming world has shrunk bee tongues

[American Association for the Advancement of Science – September 24, 2015]

[Why scientists are so worried about drylands – which make up 40 percent of the Earth’s land](#)

[Washington Post – September 14, 2015]

[Climate change could leave Pacific Northwest amphibians high and dry](#) [Science Daily –

September 4, 2015]

Greenhouse Gas Mitigation

[\\$20 million Carbon XPrize contest takes on climate change](#) [NBC News – September 29, 2015]

(“A new competition is offering \$20 million in total prize money to teams that can find ways to turn those carbon emissions into something useful, instead of treating them as pure waste”)

[Solar energy becomes a major power player in the Middle East](#)

[ClimateWire – September 28, 2015]

[Cutting greenhouse gas emissions won’t slow global economic growth - report](#)

[The Guardian – September 26, 2015]

[Microsoft leads movement to offset emissions with internal carbon tax](#)

[New York Times – September 26, 2015]

[Climate change: US landfill methane emissions grossly underestimated, finds new study](#)

[International Business Times – September 22, 2015]

[This report says the world can go 100 percent renewable by 2050](#)

[Think Progress – September 21, 2015]

[Copepod migrations are important for the ocean’s CO2 uptake](#)

[Science Daily – September 8, 2015]

Climate Adaptation

[Secretary John Laird discusses climate change adaptation at Southern California conference](#)

[Maven’s Notebook – September 15, 2015]

International Planning

[Limited progress seen even as more nations step up on climate](#)

[New York Times – September 28, 2015]

[Four world leaders to watch on climate change](#) [Wall Street Journal – September 25, 2015]

[Scotland “determined to lead by example” on climate change: First Minister Nicola Sturgeon](#)

[The Climate Group – September 22, 2015]

[Women farmers battle climate change and drought](#) [Jakarta Post – September 15, 2015]

[US, China pair up on climate change](#) [Voice of America – September 15, 2015] (*“The commitments that the Chinese and American cities are taking as part of this summit are a very important component of our broader efforts by our two countries to deepen climate cooperation and to show that the two largest emitters in the world are taking seriously our obligations to meet the ambitions goals we set out last year”*)

[Bangladeshi Prime Minister wins UN environmental prize for leadership on climate change](#)

[UN News Centre – September 14, 2015]

[Paris climate talks could fail, warns Francois Hollande](#) [The Guardian – September 7, 2015]

(*“There is a risk of failure...[and] it won’t be hundreds of thousands of refugees in the next 20 years, it will be millions” according to French president Francois Hollande*)

Communicating Climate Change

[“This Changes Everything” aims to be the climate change documentary for people who hat climate docs](#) [Tree Hugger – September 29, 2015]

[Purdue study: Climate change consensus extends beyond climate scientists](#)

[Purdue University – September 24, 2015]

[Denial101X MOOC \(Massive Open Online Course\) – Full list of videos and references at your fingertips](#) [Skeptical Science – September 3, 2015] (*“The lectures and expert interviews provide a unique resources for countering climate myths, learning effective myth-debunking techniques, and learning the basics of climate science in easily digestible bites. These resources are now available in an organized and easily searched format”*)

BLOGS/Commentary

Joe Romm on [“When Tesla and Apple compete to out-do each other on electric cars, the planet wins”](#) [Climate Progress – September 24, 2015]

Mary Ellen Harte on [“Climate change this week: Preserving biodiversity, solar origami, and more!”](#) [Huffington Post – September 22, 2015]

Joe Kaeser on [“Industry can lead on climate change”](#) [New York Times – September 22, 2015] (*The chief executive of Siemens, a global manufacturing company, understands that “taking action (to address climate change) is not just prudent – it’s profitable”*)

Noah Diffenbaugh and Christopher Field on ["A wet winter won't save California"](#)

[New York Times – September 18, 2015] (*"Our research has shown that global warming has doubled the odds of the warm, dry conditions that are intensifying and prolonging this drought, which now holds records not only for lowest precipitation and highest temperature, but also for the lowest spring snowpack in the Sierra Nevada in at least 500 years"*)

Andrew Revkin on ["New study: Burn it all \(fossil fuel\), lose it all \(Antarctic ice and today's coasts\)"](#) [New York Times – September 11, 2015]

Jonathan Chait on ["The sunniest climate change story you've ever read – This is the year humans finally got serious about saving themselves from themselves"](#)

[New York Magazine – September 7, 2015]

Additional Items of Interest

[One of the world's most powerful central bankers is worried about climate change](#)

[New York Times – September 30, 2015] (*"His warning, delivered in a 4,400 word speech...is the latest example of how climate change has moved beyond theoretical scientific debates to the start of practical planning for safeguarding the economy and business"*)

[Four ways climate change affects women more than men](#)

[Pacific Standard – September 30, 2015]

[Why cities are the next frontier in the fight against climate change](#)

[Time – September 29, 2015]

[Six major US banks urge global leaders to adopt climate change agreement](#)

[September 28, 2015]

[China just took away our biggest excuse on climate change](#) [September 25, 2015]

[U.S.-China Joint Presidential Statement on Climate Change](#)

[White House – September 25, 2015]

[Elon Musk says the refugee crisis is just a glimpse of what's to come if we ignore climate change](#)

[Tech Insider – September 24, 2015] (*The SpaceX and Tesla CEO asks "In 20, 30, 40 years in the future what do you say to your kids or your grandkids?...When they ask 'Why didn't you do anything?' What will you tell them?"*)

[Celebrated NASA planet hunter shifts his sights back to climate change on Earth](#)

[September 24, 2015]

[Big Island at the center of climate change data collection](#)

[West Hawaii Today – September 24, 2015]

[Obama takes on climate change: The Rolling Stone interview](#)

[Rolling Stone – September 23, 2015]

[Climate change is a major threat to readiness, expert says](#) [Army Times – September 23, 2015]

[At White House, Pope appeals for climate change action](#) [US News – September 23, 2015]

[Global companies joining climate change efforts](#) [New York Times – September 23, 2015]

(Johnson & Johnson, Proctor & Gamble, Starbucks, Walmart, and Goldman Sachs will join a [global coalition of firms](#) intent on converting to renewable energy)

[The Alaska scientist who teaches the Catholic Church about climate change](#)

[Alaska Dispatch News – September 23, 2015]

[Exxon confirmed global warming consensus in 1982 with in-house climate models](#)

[Inside Climate News – September 22, 2015] (*“The report, which circulated within the company through the early 1980’s, reflected Exxon’s growing need to understand when the climate implications of increased CO2 emissions would begin to spur policy changes”*)

[How your trash is contributing to climate change](#) [Time – September 22, 2015]

[The important message behind all the green ribbons at the Emmys](#)

[Think Progress – September 21, 2015] (*Emmy attendees Don Cheadle, Julia Louis-Dreyfus and author George R.R. Martin were all wearing green ribbons as part of a campaign to call for strong action on climate change*)

[Pope’s concern about climate change prompts Notre Dame to end use of coal](#)

[USA Today – September 21, 2015]

[Climate change could cost trillions more in damages, because of thawing Arctic permafrost](#)

[American Association for the Advancement of Science – September 21, 2015]

[Climate change: Sierra Nevada snowpack at lowest level in 500 years](#)

[Nature World News – September 17, 2015]

[A Greenhouse Gas Surprise](#) [Scientific American – September 15, 2015] (*“China and the U.S.*

send much more carbon dioxide into the atmosphere than other countries. Yet on a per person basis, Qatar, Trinidad and Tobago, and Kuwait have the highest rates in the world, according to researchers at the World Resources Institute”)

[Dealing with climate change and local beliefs in Africa](#) [Phys.Org – September 15, 2015]

(“Experts should take note of local knowledge and beliefs when making plans about how to help people in vulnerable regions cope with the impacts of climate change.”)

[Why is the man who predicted climate change forgotten?](#)

[National Geographic – September 13, 2015] *(“Alexander von Humboldt isn’t a household name today, but ecologists and nature writers remain rooted in his vision of nature”)*

[Climate change’s worst case scenario: 200 feet of sea level rise](#)

[Inside Climate News – September 11, 2015] *(If we burned all of the remaining available fossil fuel reserves, we’ll release about 10,000 gigatons of carbon which will almost completely melt the Antarctic ice sheet, which would mean that...”seas could rise nearly 10 feet each century in the first 1,000 years under this scenario, and would continue to rise for thousands of years after that”)*

[Music heavyweights team for climate change song](#) [CBS News – September 4, 2015] *(Paul*

McCartney, Jon Bon Jovi, Sheryl Crow and Fergie, among others, have joined forces to record a song about climate change)

[FACT SHEET] [President Obama announces new investments to combat climate change and assist remote Alaskan communities](#) [The White House – September 2, 2015]

[Climate change means one world’s death and another’s birth](#) [Wired – September 1, 2015]

(“As ocean acidification restructures marine ecosystems, the first fish to go will be the fish that people rely on for money and food”)

Images to Ponder

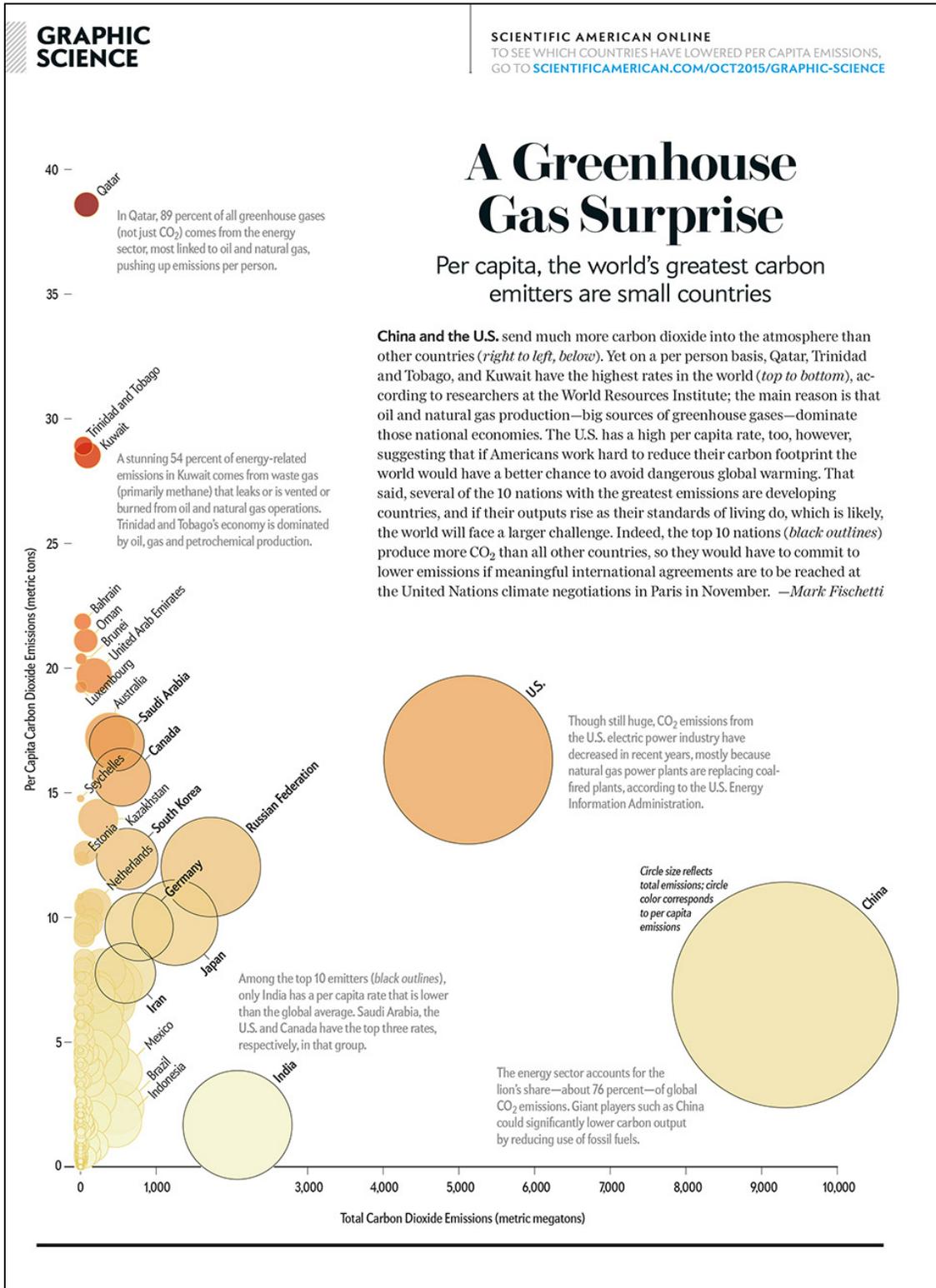
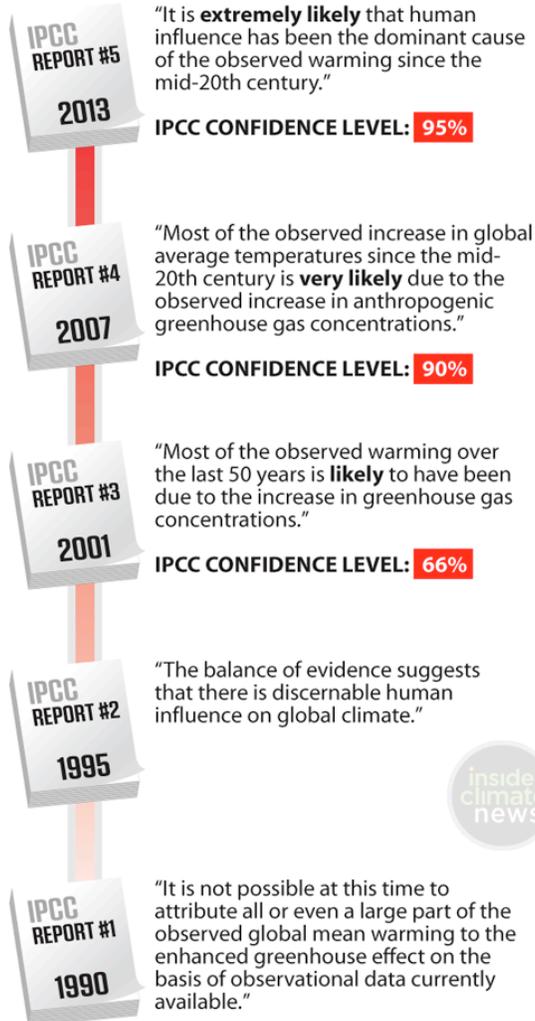


Image source: http://www.scientificamerican.com/article/china-and-america-are-not-the-biggest-carbon-emitters-on-a-per-person-basis/?WT.mc.id=SA_ENGYSUS_20150917

The Growing Certainty of IPCC Climate Models and Assessments

Relying on better and better climate models, the **Intergovernmental Panel on Climate Change** (IPCC) has expressed increasing confidence that human activity is driving global warming.



SOURCE: IPCC

PAUL HORN / InsideClimate News

Image credit: <http://insideclimatenews.org/content/growing-certainty-ipcc-climate-models-and-assessments>

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