

SOURCE : La Presse ; 2016-09-21

Près de 400 scientifiques fustigent les positions de Trump sur le climat



Le candidat républicain à la présidentielle Donald Trump a promis que les États-Unis se retireraient des accords de Paris sur le climat s'il était élu.

Près de 400 scientifiques, dont 30 prix Nobel, fustigent dans une lettre ouverte le candidat républicain à la Maison-Blanche Donald Trump pour avoir promis, s'il était élu, de retirer les États-Unis de l'accord de Paris sur le climat.

« Un "Parexit" enverrait un signal clair au reste du monde que les États-Unis ne se soucient pas des problèmes globaux du réchauffement climatique provoqués par les activités humaines », écrivent-ils.

Pour eux, « les conséquences d'une telle décision seraient sévères et durables pour le climat de notre planète et la crédibilité internationale des États-Unis ».

Pendant la campagne des élections primaires « des affirmations ont été faites selon lesquelles la planète ne se réchauffait pas ou que le réchauffement résultait seulement de causes naturelles, ce qui est contraire à la réalité », relèvent les cosignataires en référence aux déclarations de Donald Trump.

Publiée mardi sur le site responsiblescientists.org, cette lettre a été cosignée par 375 scientifiques pour la majorité américains à qui s'est joint notamment l'astrophysicien britannique Stephen Hawking.

Les chefs d'État et de gouvernement des 190 pays qui ont conclu l'accord de Paris en décembre dernier sont tous tombés d'accord sur le fait que le changement climatique présentait un danger pour le monde.

Cet accord représente « un premier pas modeste mais historique et qui est essentiel vers la mise en oeuvre d'une gestion éclairée du système climatique terrestre », jugent ces scientifiques.

De ce fait « il est des plus préoccupant que le candidat républicain pour la présidence prône un retrait des États-Unis de l'accord de Paris », insiste la lettre. « Une telle décision rendrait beaucoup plus difficile de développer des stratégies mondiales visant à minimiser et à s'adapter au changement climatique ».

« Si les États-Unis se retirent de l'accord de Paris il sera alors nettement moins probable que le pays pourra jouer un rôle dominant politiquement, économiquement ou moralement », préviennent-ils.

La publication américaine Science avait demandé aux candidats à la Maison-Blanche leur vues sur le réchauffement climatique et Donald Trump avait répondu « qu'il fallait encore faire beaucoup de recherche sur ce sujet ».

Sa rivale démocrate, Hillary Clinton a au contraire dit que « la science était claire », estimant que « le changement climatique représentait une menace pressante et était un des grands défis de notre temps dont les impacts se font déjà sentir aux États-Unis et partout dans le monde ».

Elle a aussi proposé que les États-Unis produisent la moitié de leur électricité à partir de sources d'énergie propres, dont le solaire, dans les dix prochaines années.

Les candidats à la présidence ont répondu à vingt questions et leurs réponses peuvent être vues à l'adresse : <http://sciencedebate.org/20answers>.

SOURCE : <http://responsiblescientists.org/>

On September 20, 2016, 375 members of the National Academy of Sciences, including 30 Nobel laureates, published an open letter to draw attention to the serious risks of climate change. The letter warns that the consequences of opting out of the Paris agreement would be severe and long-lasting for our planet's climate and for the international credibility of the United States.

A full list of signers follows the text of the letter.

Members of the media interested in speaking with one of the organizers of the letter should contact responsiblescientists@gmail.com.



An Open Letter Regarding Climate Change From Concerned Members of the U.S. National Academy of Sciences

Human-caused climate change is not a belief, a hoax, or a conspiracy. It is a physical reality. Fossil fuels powered the Industrial Revolution. But the burning of oil, coal, and gas also caused most of the historical increase in atmospheric levels of heat-trapping greenhouse gases. This increase in greenhouse gases is changing Earth's climate.

Our fingerprints on the climate system are visible everywhere. They are seen in warming of the oceans, the land surface, and the lower atmosphere. They are identifiable in sea level rise, altered rainfall patterns, retreat of Arctic sea ice, ocean acidification, and many other aspects of the climate system. Human-caused climate change is not something far removed from our day-to-day experience, affecting only the remote Arctic. It is present here and now, in our own country, in our own states, and in our own communities.

During the Presidential primary campaign, claims were made that the Earth is not warming, or that warming is due to purely natural causes outside of human control. Such claims are inconsistent with reality.

Others argued that no action is warranted until we have absolute certainty about human impacts on climate. Absolute certainty is unattainable. We are certain beyond a reasonable doubt, however, that the problem of human-caused climate change is real, serious, and immediate, and that this problem poses significant risks: to our ability to thrive and build a better future, to national security, to human health and food production, and to the interconnected web of living systems.

The basic science of how greenhouse gases trap heat is clear, and has been for over a century. Ultimately, the strength of that basic science brought the governments of the world to Paris in December 2015. They went to Paris despite pronounced differences in systems of government, in national self-interest, in culpability for past emissions of greenhouse gases, and in vulnerability to future climate change. The leaders of over 190 countries recognized that the problem of human-

caused climate change is a danger to present and future citizens of our planet. They made national commitments to address this problem. It was a small but historic and vital first step towards more enlightened stewardship of Earth's climate system.

From studies of changes in temperature and sea level over the last million years, we know that the climate system has tipping points. Our proximity to these tipping points is uncertain. We know, however, that rapid warming of the planet increases the risk of crossing climatic points of no return, possibly setting in motion large-scale ocean circulation changes, the loss of major ice sheets, and species extinctions. The climatic consequences of exceeding such thresholds are not confined to the next one or two electoral cycles. They have lifetimes of many thousands of years.

The political system also has tipping points. Thus it is of great concern that the Republican nominee for President has advocated U.S. withdrawal from the Paris Accord. A "Parexit" would send a clear signal to the rest of the world: "The United States does not care about the global problem of human-caused climate change. You are on your own." Such a decision would make it far more difficult to develop effective global strategies for mitigating and adapting to climate change. The consequences of opting out of the global community would be severe and long-lasting – for our planet's climate and for the international credibility of the United States.

The United States can and must be a major player in developing innovative solutions to the problem of reducing emissions of greenhouse gases. Nations that find innovative ways of decarbonizing energy systems and sequestering CO₂ will be the economic leaders of the 21st century. Walking away from Paris makes it less likely that the U.S. will have a global leadership role, politically, economically, or morally. We cannot afford to cross that tipping point.

The following signers of this letter do so as individual NAS members and not on behalf of the NAS itself or their Institutions.

^ = letter organizer

SIGNED BY:

Benjamin D. Santer, Member, National Academy of Sciences^
Kerry A. Emanuel, Massachusetts Institute of Technology^
George B. Field, Harvard University^
Ray Weymann, Carnegie Institution for Science Emeritus^
Peter C. Agre, Johns Hopkins Malaria Research Institute
Bruce Alberts, University of California San Francisco
Thomas D. Albright, The Salk Institute for Biological Studies
Richard M. Amasino, University of Wisconsin-Madison
Jim Anderson, Harvard University
Phillip W. Anderson, Princeton University
Roger Angel, University of Arizona
Luc E. Anselin, University of Chicago
Fred Anson, California Institute of Technology
David Arnett, University of Arizona
Mary T. Kalin Arroyo, University of Chile
Greg Asner, Carnegie Institution for Science

Sir Michael Atiyah, University of Edinburgh
Tanya M. Atwater, University of California Santa Barbara
Francisco J. Ayala, University of California Irvine
George Backus, University of California San Diego
Neta Bahcall, Princeton University
Steven Balbus, University of Oxford
David Baltimore, California Institute of Technology
Allen Bard, University of Texas
Sir David Baulcombe, University of Cambridge
Adriaan Bax, Member, National Academy of Sciences
Barry J. Beaty, Colorado State University
Michael Bender, Princeton University
Charles L. Bennett, Johns Hopkins University
Michael V.L. Bennett, Albert Einstein College of Medicine
Jeffrey L. Bennetzen, University of Georgia
John Bercaw, California Institute of Technology
May R. Berenbaum, University of Illinois at Urbana-Champaign
Howard Berg, Harvard University
Robert Bergman, University of California Berkeley
Jacques E. Blamont, Centre National d' Etudes Spatiales
Roger Blandford, Stanford University
Michael R Botchan, University of California Berkeley
Ed A. Boyle, Massachusetts Institute of Technology
Daniel Branton, Member, National Academy of Sciences
Winslow Briggs, Carnegie Institution for Science
Steven P. Briggs, University of California San Diego
Wallace Broecker, Columbia University
Axel T. Brunger, Stanford University
Douglas W. Burbank, University of California Santa Barbara
E. Margaret Burbidge, University of California San Diego Emerita
John Cairns, Virginia Polytechnic Institute and State University
Mark A. Cane, Columbia University
Claude Canizares, Massachusetts Institute of Technology
Marian Carlson, Columbia University
John Carlson, Yale University
Stephen Carpenter, University of Wisconsin-Madison
Sean B. Carroll, University of Wisconsin-Madison
Emily A. Carter, Princeton University
Katherine Cashman, University of Bristol
Juan Carlos Castilla, Pontificia Universidad Católica de Chile
Anny Cazenave, Centre National d'Etudes Spatiales
Thure E. Cerling, University of Utah
Sylvia T. Ceyer, Massachusetts Institute of Technology
Martin Chalfie, Columbia University
F. Stuart Chapin, University of Alaska
Roger Chevalier, University of Virginia
Steven Chu, Stanford University
Ralph Cicerone, Professor Emeritus, University of California
David E. Clapham, Harvard Medical School
George Clark, Massachusetts Institute of Technology

Michael T. Clegg, University of California Irvine
Claude Cohen-Tannoudji, Laboratoire Kastler Brossel
Jonathan J. Cole, Cary Institute of Ecosystem Studies
Rita R. Colwell, University of Maryland
Karen S. Cook, Stanford University
Richard M. Cowling, Nelson Mandela Metropolitan University
James Cronin, University of Chicago
Paul J. Crutzen, Max Planck Institute for Chemistry
Roy Curtiss III, University of Florida
Gretchen Daily, Stanford University
G. Brent Dalrymple, Oregon State University
Sir Partha Dasgupta, University of Cambridge
Earl W. Davie, University of Washington
Russ E. Davis, University of California San Diego
Marc Davis, University of California Berkeley
Ruth DeFries, Columbia University
Edward F. DeLong, University of Hawaii Manoa
David L. Denlinger, Ohio State University
George Denton, University of Maine
Donald DePaolo, University of California Berkeley
Bob Dickinson, University of Texas
Rodolfo Dirzo, Stanford University
Michael J. Donoghue, Yale University
Russell F. Doolittle, University of California San Diego
Dennis A. Dougherty, California Institute of Technology
John E. Dowling, Harvard University
Bruce Draine, Princeton University
Alan Dressler, Carnegie Institution for Science
Thomas Dunne, University of California Santa Barbara
Joseph R. Ecker, Member, National Academy of Sciences
R. Lawrence Edwards, University of Minnesota
Paul Ehrlich, Stanford University
John M. Eiler, California Institute of Technology
David Eisenberg, University of California Los Angeles
Richard Eisenberg, University of Rochester
W. Gary Ernst, Stanford University
Mark Estelle, University of California San Diego
James A. Estes, University of California Santa Cruz
Paul Falkowski, Rutgers University
Nina V. Fedoroff, Pennsylvania State University Emerita
Juli Feigon, University of California Los Angeles
Joseph Felsenstein, University of Washington
Alex Filippenko, University of California Berkeley
Gerald D. Fischbach, Simons Foundation, Chief Scientist
Edmond H. Fischer, University of Washington
Donald Forsyth, Brown University
Stewart Fotheringham, Arizona State University
Wendy Freedman, University of Chicago
Katherine H. Freeman, Pennsylvania State University
Perry Allen Frey, University of Wisconsin-Madison

Margaret T. Fuller, Stanford University
Douglas J. Futuyma, Stony Brook University
Fred H. Gage, Salk Institute for Biological Research
Chris Garrett, University of Victoria
Neil Gehrels, Member, National Academy of Sciences
Reinhard Genzel, Max-Planck-Institut für Extraterrestrische Physik
Howard Georgi, Harvard University
Charles Gilbert, The Rockefeller University
Sheldon Glashow, Boston University
Roy Glauber, Harvard University
Alexander N. Glazer, University of California Berkeley
Peter H. Gleick, Pacific Institute
Stephen P. Goff, Columbia University
Robert B. Goldberg, University of California Los Angeles
Peter Goldreich, Institute for Advanced Study, Princeton
Michael Goodchild, University of California Santa Barbara
Richard Goody, Harvard University
Fred Gould, North Carolina State University
Harry Gray, California Institute of Technology
Paul Greengard, Rockefeller University
Diane E. Griffin, Johns Hopkins Bloomberg School of Public Health
David Gross, University of California Santa Barbara
Charles G. Gross, Princeton University
Carol A. Gross, University of California San Francisco
Timothy Grove, Massachusetts Institute of Technology
Robert H. Grubbs, California Institute of Technology
Jim Gunn, Princeton University
Sarah Hake, Agricultural Research Service
Alexander Halliday, University of Oxford
Jim Hansen, Columbia University
Susan Hanson, Clark University
Stanley Hart, Woods Hole Oceanographic Institution
Daniel L. Hartl, Harvard University
Dennis Hartmann, University of Washington
Robert Haselkorn, The University of Chicago
Alan Hastings, University of California Davis
Robert M. Hauser, University of Wisconsin-Madison
Stephen Hawking, Cambridge University
Wick C. Haxton, University of California Berkeley
John Hayes, Woods Hole Oceanographic Institution
Martha P. Haynes, Cornell University
Timothy Heckman, Johns Hopkins University
Carl Heiles, University of California Berkeley
Lars Hernquist, Harvard University
Dudley Herschbach, Harvard University
John G. Hildebrand, University of Arizona
David M. Hillis, University of Texas
Sarah Hobbie, University of Minnesota
Bert Hoelldobler, Arizona State University
Paul F. Hoffman, University of Victoria

Albrecht W. Hofmann, Max Planck Institute for Chemistry
Sir Brian Hoskins, Imperial College London & University of Reading
Andre T. Jagendorf, Cornell University
Daniel H. Janzen, University of Pennsylvania
J.R. Jokipii, University of Arizona
Tom Jordan, University of Southern California
Jean Jouzel, Laboratoire des Sciences du Climate et de l'Environnement
William A. Jury, University of California Riverside
H. Ronald Kaback, University of California Los Angeles
Thomas Kailath, Stanford University
Peter M. Kareiva, University of California Los Angeles
David Karl, University of Hawaii
Harvey Karten, Professor Emeritus, University of California San Diego
Guinevere Kauffmann, Max Planck Institute for Astrophysics
Steve A. Kay, University of Southern California
Paul Kay, International Computer Science Institute
Peter Kelemen, Columbia University
Kenneth Kellermann, National Radio Astronomy Observatory
Donald Kennedy, Stanford University
Charles Kennel, University of California San Diego
Robert C. Kennicutt, Cambridge University
Wolfgang Ketterle, Massachusetts Institute of Technology
Margaret Kidwell, University of Arizona
Susan W. Kieffer, University of Illinois at Urbana-Champaign
Peter S. Kim, Stanford University
Patrick V. Kirch, University of California Berkeley
Margaret Kivelson, University of California Los Angeles
Daniel Kleppner, Massachusetts Institute of Technology
Catherine L. Kling, Iowa State University
Judith P. Klinman, University of California Berkeley
Eric I. Knudsen, Stanford University School of Medicine
Brian Koblika, Stanford University School of Medicine
M.A.R. Koehl, University of California Berkeley
David Kohlstedt, University of Minnesota
Sir Hans Kornberg, Boston University
John Krebs, University of Oxford
Shrinivas Kulkarni, California Institute of Technology
J. Clark Lagarias, University of California Davis
Kurt Lambeck, Australian National University
Eric Lambin, Stanford University
Arthur Landy, Brown University
Charles H. Langmuir, Harvard University
Brian A. Larkins, University of Nebraska, Lincoln
John H. Law, University of Arizona Emeritus
Sir John Lawton, Former Chief Executive, UK Natural Environment Research Council
Yuan Lee, Academia Sinica Taiwan
Richard E. Lenski, Michigan State University
Simon Levin, Princeton University
Michael Levitt, Stanford University School of Medicine
Gene E. Likens, Cary Institute of Ecosystem Studies

Laszlo Lorand, Feinberg Medical School Northwestern University Emeritus
C. Owen Lovejoy, Kent State University
Jane Lubchenco, Oregon State University
Jonathan I. Lunine, Cornell University
Michael Lynch, Indiana University
Akin Mabogunje, Foundation for Development and Environmental Initiatives
Trudy Mackay, North Carolina State University
Anthony P. Mahowald, University of Chicago
Syukuro Manabe, Princeton University
Joyce Marcus, University of Michigan
Rudolph A. Marcus, California Institute of Technology
Douglas S. Massey, Princeton University
Pamela A. Matson, Stanford University
Rowena G. Matthews, University of Michigan Emerita
Michel G. Mayor, University of Geneva
Bonnie J. McCay, Rutgers University
Richard McCray, University of Colorado
Bruce S. McEwen, Rockefeller University
Fred McLafferty, Cornell University
Jim McWilliams, University of California Los Angeles
Jerrold Meinwald, Cornell University
Jerry M. Melillo, Marine Biological Laboratory, Woods Hole
Henry J. Melosh, Purdue University
Sabeeha Merchant, University of California Los Angeles
Joachim Messing, Rutgers University
Mario Molina, University of California San Diego
Harold Mooney, Stanford University
Peter B. Moore, Yale University
James M. Moran, Member, National Academy of Sciences
Nancy Moran, University of Texas
M. Granger Morgan, Carnegie Mellon University
Ellen S. Mosley-Thompson, Ohio State University
Walter Munk, University of California San Diego
Royce Murray, University of North Carolina
Sidney Nagel, University of Chicago
Ramesh Narayan, Harvard University
Jeremy Nathans, Johns Hopkins University School of Medicine
Eugene W. Nester, University of Washington
William T. Newsome, Stanford University
Richard P. Novick, New York University School of Medicine
Paul E. Olsen, Columbia University
Peter Olson, Johns Hopkins University
Neil D. Opdyke, University of Florida
Jeremiah Ostriker, Columbia University
Sarah Otto, University of British Columbia
Sir Ronald Oxburgh, Cambridge University
Stephen Pacala, Member, National Academy of Sciences
Norman R. Pace, University of Colorado
Richard D. Palmiter, University of Washington School of Medicine
Stephen Palumbi, Stanford University

Joseph Pedlosky, Woods Hole Oceanographic Institution
Jim Peebles, Princeton University
Gordon Pettengill, Massachusetts Institute of Technology
S. George Philander, Princeton University
William Phillips, Member, National Academy of Sciences
Dolores R. Piperno, Member, National Academy of Sciences
Terry Plank, Columbia University
William H. Press, University of Texas
Frank Press, Member, National Academy of Sciences
George W. Preston, Carnegie Institution for Science
Peter H. Raven, Missouri Botanical Garden
Maureen E. Raymo, Columbia University
Martin Rees, Cambridge University
Peter Rhines, University of Washington
Frank Richter, University of Chicago
Robert E. Ricklefs, University of Missouri
Lynn M. Riddiford, University of Washington
George Rieke, University of Arizona
Marcia Rieke, University of Arizona
Adam Riess, Johns Hopkins University
Morton Roberts, National Radio Astronomy Observatory
Gene E. Robinson, University of Illinois at Urbana-Champaign
A. Kimball Romney, University of California Irvine
Michael Rosbash, Brandeis University
Mal Ruderman, Columbia University
Roberta L. Rudnick, University of California Santa Barbara
Gary Ruvkun, Massachusetts General Hospital
Roald Sagdeev, University of Maryland
Pedro A. Sanchez, Columbia University
David Sandwell, University of California San Diego
Joshua R. Sanes, Harvard University
Daniel L. Schacter, Harvard University
Paul Schechter, Massachusetts Institute of Technology
Randy W. Schekman, University of California Berkeley
Hans Joachim Schellnhuber, Potsdam Institute for Climate Impact Research
David W. Schindler, University of Alberta
Bill Schlesinger, Cary Institute of Ecosystem Studies
Johanna Schmitt, University of California Davis
Robert J. Scholes, University of the Witwatersrand
Julian Schroeder, University of California San Diego
Gerald Schubert, University of California Los Angeles
Matthew P. Scott, President, Carnegie Institution for Science
Sara Seager, Massachusetts Institute of Technology
Ronald R. Sederoff, North Carolina State University
Jeff Severinghaus, University of California San Diego
Irwin Shapiro, Harvard University
Carla J. Shatz, Stanford University
Peter Shearer, University of California San Diego
Frank Shu, University of California San Diego
Kerry Sieh, Nanyang Technological University

James Simons, Chairman, Simons Foundation
Norman H. Sleep, Stanford University
Susan Solomon, Massachusetts Institute of Technology
Pamela S. Soltis, University of Florida
Alfred Sommer, Johns Hopkins Bloomberg School of Public Health
David Spergel, Princeton University
Nicholas C. Spitzer, University of California San Diego
Charles Steidel, California Institute of Technology
Thomas A. Steitz, Yale University
Edward Stolper, California Institute of Technology
Howard A. Stone, Princeton University
Joan E. Strassmann, Washington University, St. Louis
Timothy Swager, Massachusetts Institute of Technology
Lynn R. Sykes, Columbia University Emeritus
Harvey Tananbaum, Member, National Academy of Sciences
Joseph Taylor, Princeton University
Saul A. Teukolsky, Cornell University
David Hurst Thomas, American Museum of Natural History
Lonnie Thompson, Ohio State University
Kip Thorne, Member, National Academy of Sciences
James M. Tiedje, Michigan State University
Alar Toomre, Massachusetts Institute of Technology
Scott Tremaine, Institute for Advanced Study
Susan Trumbore, Max Planck Institute for Biogeochemistry
James Tumlinson, Pennsylvania State University
Monica G. Turner, University of Wisconsin-Madison
Anthony Tyson, University of California Davis
Joan Selverstone, Valentine University of California Los Angeles
James L. Van Etten, University of Nebraska
Martha Vaughan, Member, National Academy of Sciences
Inder Verma, The Salk Institute for Biological Studies
George Veronis, Yale University
Peter H. von Hippel, University of Oregon
Gerhard Wagner, Harvard Medical School
David B. Wake, University of California Berkeley
David Walker, Columbia University
John M. Wallace, University of Washington
E. Bruce Watson, Member, National Academy of Sciences
Steven Weinberg, University of Texas
Rainer Weiss, Massachusetts Institute of Technology
William J. Welch, University of California Berkeley
Mary Jane West-Eberhard, Smithsonian Tropical Research Institute Emerita
Simon D.M. White, Max Planck Institute for Astrophysics
Torsten N. Wiesel, President Emeritus, The Rockefeller University
Edward O. Wilson, Harvard University
Robert W. Wilson, Member, National Academy of Sciences
David Wineland, Member, National Academy of Sciences
Steven Wofsy, Harvard University
Julian Wolpert, Princeton University
John Wood, Member, National Academy of Sciences

George M. Woodwell, Woods Hole Research Center
Stanford E. Woosley, University of California Santa Cruz
Carl Wunsch, Massachusetts Institute of Technology
Keith Yamamoto, University of California San Francisco
Martin Yanofsky, University of California San Diego
Tilahun Yilma, University of California Davis
William Young, University of California San Diego
Mary Lou Zoback, Stanford University
Maria T. Zuber, Massachusetts Institute of Technology