

**The Week That Was: 2017-06-10 (June 10, 2017)**  
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**The Science and Environmental Policy Project**

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**Quote of the Week.** *Genius is one percent inspiration and ninety-nine percent perspiration.* – Thomas Edison

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**Number of the Week:** 92,000

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**THIS WEEK:**

***By Ken Haapala, President, Science and Environmental Policy Project (SEPP)***

**Rule of Law?** In a frank interview about President Trump’s withdraw from the Paris Agreement, EPA Administrator Scott Pruitt articulates what many skeptics believe to be a major failing in the EPA and other government regulatory entities – the rule of law has been replaced by judicial and regulatory interpretations of vague language.

*“I think that what’s lost in the debate and discussion at times is the tools in the toolbox, if you will, that the EPA actually possesses or doesn’t possess to respond to the CO2 issue,” said Pruitt.*

*“He looked back to the legal battle between the state of Massachusetts and the EPA in 2007, which ended at the Supreme Court. He noted the outcome did not force the EPA to regulate CO2 but ‘simply said it had to make a decision on whether CO2 actually poses a risk to human health and the environment.’*

*“Following that was the endangerment finding in 2009, which eventually led to the Paris discussion and clean power plan, all the rulemaking and the climate action agenda of the previous administration,” he recalled. ‘What’s not discussed at all is, has Congress ever responded or acted upon this matter; this issue of CO2 with respect to power generation? I will tell you, they clearly have not.’*

*“If you go back to the clean air amendments from 1990, many of the folks, including Congressman Dingell, – a Democrat as you know – said that it would be a ‘glorious mess’ to endeavor to use the current framework to regulate CO2. The framework that we have is a framework that’s supposed to address local and regional air pollutants, not in my estimation, based upon those who amended the Clean Air Act in 1990, this phenomenon that people describe as the greenhouse gas effect,” he said.*

*“The only power that agencies have, executive agencies have, is the power given to them by Congress,” he stressed. ‘We can’t reimagine authority. We can’t make up authority. This Supreme Court has been very, very consistent at sending that message through court decisions over the last several years.’*

*“Pollak built on Pruitt’s point to argue there is a profound difference between the Environmental Protection Agency’s original mandate to combat pollution and ‘what it’s being asked to do by the left, which is to regulate fossil fuel use, and energy use, and energy efficiency around CO2.’*

*“Pruitt agreed it was important to emphasize the distinction between pollutants and carbon dioxide, a naturally occurring component of the earth’s atmosphere.*

*“‘The American people deserve this debate. They deserve this discussion because it is an orthodoxy,’ he declared. ‘It’s been an orthodoxy for the last several years, and you have rightly stated it.’”*

Pruitt described category pollutants under the National Ambient Air Quality Standards Program. Carbon dioxide (CO<sub>2</sub>) is not a pollutant in the law, but a pollutant made up in the courts. To label this essential gas a pollutant is contrary to language, logic, and science.

Pruitt called for a Red Team, Blue Team analysis asking: *“What do we know? What don’t we know? What risk does it pose to health in the United States and the world, with respect to this issue of CO<sub>2</sub>?”*

*“The American people need to have that type of honest, open discussion, and it’s something that we hope to help provide as part of our leadership.”*

The reports of the Nongovernmental International Panel on Climate Change (NIPCC) were designed to provide an alternative analysis (Blue Team) to the reports of the UN International Panel on Climate Change (IPCC). Perhaps, ever so slowly, the need to have such an analysis is penetrating the morass of Washington. See links under Challenging the Orthodoxy – NIPCC and Change in US Administrations.

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**Symbolism of Paris:** Writing in the *Wall Street Journal*, columnist Holman Jenkins discusses what a few others have observed – the Paris Agreement is largely symbolic, it has little real meaning. However, dismissing the Agreement as merely symbolic creates a dangerous opportunity for those demanding CO<sub>2</sub> regulation – it opens a litigation tar pit.

When discussing legislation such as the Clean Air Act in Congress, opponents demanded clear language for vague terms. Proponents, such as Senator Ted Kennedy, responded with the mantra “Let the courts decide.” The courts have decided, helping create the morass in Washington where CO<sub>2</sub>, critical for all green plants, thus life as we generally know it, is called a pollutant. The EPA and the environmental industry have thrived, with regulations growing enormously under the mantra of “Let the courts decide.” When Congress abdicates its sworn responsibility, the public suffers. See Article # 1 and links under Change in US Administrations – Favor and Change in US Administrations – Opposed.

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**Hidden Costs of Paris:** In his speech stating that the US is withdrawing from the Paris Agreement, President Trump stated that the Agreement has already cost the US about one billion dollars. In the articles reviewed, those opposing Mr. Trump’s action have not seriously disputed this number. A question remains, from what programs were these funds taken? It is time for the US government to undergo a serious audit.

In opposing Mr. Trump’s withdrawal from the Paris Agreement, James Temple reveals a hidden cost to the US for remaining in the Agreement – the Mission Innovation pact of 2015. According to Mr. Temple:

*“Ultimately, 22 countries plus the European Union would sign onto the deal, which sought to ‘develop and scale breakthrough technologies ... to enable the global community to meet our shared climate goals.’ China pledged to raise its spending by around \$3.8 billion, while the United States committed to increase funding by more than \$6 billion by 2021.”*

This \$6 billion to Mission Innovation has not been generally discussed, and may be one of many undisclosed “side deals” in which the Obama Administration participated.

According to its web site, the goal of Mission Innovation is:

*“In support of economic growth, energy access and security, and an urgent and lasting global response to climate change, our mission is to accelerate the pace of clean energy innovation to achieve performance breakthroughs and cost reductions to provide widely affordable and reliable clean energy solutions that will revolutionize energy systems throughout the world over the next two decades and beyond.*

*“Accelerating clean energy innovation is essential to limiting the rise in global temperatures to well below 2°C. While significant progress has been made in cost reduction and deployment of many clean energy technologies, the pace of innovation and the scale of transformation and dissemination remains significantly short of what is required.*

*“To reinvigorate global efforts in clean energy innovation, Mission Innovation members share a common goal to develop and scale breakthrough technologies and substantial cost reductions. MI members aim to double public clean energy research and development investment over five years. See what we are working on.”*

Subsequent pages reveal the commitment of the US to be \$6.415 billion in 2017 (of a total of \$14.861 billion) rising to \$12.830 billion in 2021 (of a total of \$29.912 billion). Some members of Congress may be surprised that the Departments of Energy and State are so free at committing US funds without specific Congressional approval. Clearly, these entities have far more money than what they need to accomplish their Congressionally approved tasks. See links under Change in US Administrations -- Opposed

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**Innovation by Government Mandate?** Far too often those who advocated spending government money for innovation fail to recognize the limitations of such expenditures. When it was fashionable to believe that the world would soon run out of oil, many advocated a government “Manhattan Project” for energy. Few of the advocates recognized that 90% of the funding went to manufacturing the bomb material and the facilities to produce it, about 10% went to development and production of weapons. Germany, the UK, and perhaps Japan had the scientific skill, but the US had the economic base to follow through.

Once the feasibility was shown by the Chicago atomic pile in 1941, the path was clear. Chiefly, two facilities manufactured the fissile material: Hanford, Washington, for plutonium; and Oak Ridge for uranium-235. The only scientific issue was the trigger of the plutonium bomb.

Similarly, many capital-intensive projects were undertaken in the 70s and 80s to develop replacements for crude oil, in the fear that reserves were being exhausted. But, the effort that really worked was undertaken by independent oil and gas producer George Mitchell, who was

committed to extract natural gas from “source rock” – dense shale. In these efforts, he earned the ridicule of many “experts.” The quote of the week from Edison applies to Mitchell’s efforts.

The US does not need alternatives to fossil fuels for “energy security” or similar fears. There is little justification for increased government spending on alternative energy, but for limiting it to basic research. As discussed in the last two TWTW’s, Mark Mills states that solar and wind appear to be approaching a limit on how much can be accomplished with existing technologies.

*“There are no game-changing advances left in the core technologies; both are now on the curve of diminishing returns. (Biofuels crossed that Rubicon centuries ago.) Nor are there big gains in economies of scale for the underlying components—concrete, steel, fiberglass, silicon, wires, and glass are all already in mass production.*

*“If we want a different energy revolution, we’ll need new discoveries in the physical sciences. That can only emerge from basic research, not from more subsidies for yesterday’s technologies.”*

One major issue is affordable, commercially available storage of electricity. The problem has existed for over one hundred years and the only one readily available is pumped hydro storage, a technology over 90 years old, and opposed by many environmental groups. The rewards for success can be enormous. Subsidies, mandates, government pacts, international agreements, etc. are not needed. See links under Energy Issues – Non-US.

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**EPA Science Integrity Meeting Cancelled?** As discussed in the May 27 TWTW, Kimberley Strassel had an article in the May 25 *Wall Street Journal* discussing the EPA’s Office of Scientific Integrity.:

*“There’s also that ‘scientific integrity’ event planned for June. Of the 45 invitations, only one went to an organization ostensibly representing industry, the American Chemistry Council. A couple of academics got one. The rest? Earthjustice. Public Citizen. The Natural Resources Defense Council. Center for Progressive Reform. Public Employees for Environmental Responsibility. Reporters Committee for Freedom of the Press. Environmental Defense Fund. Three invites alone for the Union of Concerned Scientists. Anyone want to guess how the meeting will go?”*

The enterprising Joe Bast, President of the Heartland Institute, requested an invitation, and received it. He suggested others do the same. As of June 9, the event was cancelled, without reason. Draw your own conclusions. It would have been interesting to hear a response from an official of EPA’s scientific integrity answer a question such as:

“The EPA found that greenhouse gases such as CO2 endanger public health and welfare. Of course, the greenhouse effect occurs in the atmosphere. Independent research shows that over the past 50 years natural variations better explain atmospheric temperature change than CO2 and other greenhouse gases. What is the best physical evidence you have that CO2 is the primary cause of climate change?”

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**Climate Change and Humans:** A group of skull bones found near Marrakesh, Morocco, in the Sahara, are suggested to the oldest known specimens *Homo sapiens*. They are about 300,000 years old, predating other bones of *Homo sapiens* from East Africa by about 100,000 years. The

facial features, arms, and other markers are very similar to modern humans, but the skulls are not. It remains to be seen if these are finally classified as *Homo sapiens*.

Interestingly, many of the reports reviewed failed to mention details of the surroundings about 300,000 years ago and that species were probably gazelle hunters. Gazelles are small antelope, largely living in grasslands, savannas, and edges of deserts. The *Wall Street Journal* articles suggested the area was green. This supports research that suggests the Sahara had lakes and rivers about that time.

Regardless of how the bones are classified, the report is further confirms that the genus becoming *Homo* group expanded enormously in the current period of ice ages interrupted by brief warm periods. Civilization began in the warm period following the last Ice Age, warmer than it is now. Yet politicians and others insist humans should fear warming. If there is any major climate change to be feared, it is another ice age. Humans will adapt, but the consequences may be severe. See Article # 3.

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**Number of the Week: 92,000.** According to a January article in the *New York Times*, there are over 92,000 wind turbines in China, many of which are idle, producing no electricity for human use. It is not known how many are of value, or how many were subsidized by renewable energy mandates, targets, etc. in Europe or elsewhere. If this is what is required to lead the world in clean energy, let others do it. See links under Change in US Administrations – Opposed and Alternative, Green (“Clean”) Solar and Wind

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### SEPP’S APRIL FOOLS AWARD THE JACKSON

SEPP is conducting its annual vote for the recipient of the coveted trophy, The Jackson, a lump of coal. Readers are asked to nominate and vote for who they think is most deserving, following these criteria:

- The nominee has advanced, or proposes to advance, significant expansion of governmental power, regulation, or control over the public or significant sections of the general economy.
- The nominee does so by declaring such measures are necessary to protect public health, welfare, or the environment.
- The nominee declares that physical science supports such measures.
- The physical science supporting the measures is flimsy at best, and possibly non-existent.

The five past recipients, Lisa Jackson, Barack Obama, John Kerry, Ernest Moniz and John Holdren are not eligible. Generally, the committee that makes the selection prefers a candidate with a national or international presence. The voting will close on July 30. Please send your nominee and a brief reason why the person is qualified for the honor to Ken@SEPP.org. Thank you. The award will be presented at the annual meeting of the Doctors for Disaster Preparedness in August.

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**NEWS YOU CAN USE:**

***Challenging the Orthodoxy -- NIPCC***  
**Climate Change Reconsidered II: Physical Science**

Idso, Carter, and Singer, Lead Authors/Editors, 2013

<https://www.heartland.org/media-library/pdfs/CCR-II/CCR-II-Full.pdf>

Summary: <http://www.nipccreport.org/reports/ccr2a/pdf/Summary-for-Policymakers.pdf>

### **Climate Change Reconsidered II: Biological Impacts**

Idso, Idso, Carter, and Singer, Lead Authors/Editors, 2014

<http://www.nipccreport.org/reports/ccr2b/pdf/Full-Report.pdf>

Summary: <https://www.heartland.org/media-library/pdfs/CCR-IIb/Summary-for-Policymakers.pdf>

### **Why Scientists Disagree About Global Warming**

The NIPCC Report on the Scientific Consensus

By Craig D. Idso, Robert M. Carter, and S. Fred Singer, NIPCC, Nov 23, 2015

<http://climatechangereconsidered.org/>

Download with no charge

<https://www.heartland.org/policy-documents/why-scientists-disagree-about-global-warming>

### ***Challenging the Orthodoxy***

**In the future, people will marvel how hysterical mankind has been, Lindzen says**

An interview with Richard Lindzen in Prague in mid May 2017

Guest blog by Daniel Kaiser, writer at conservative Echo & Echo24.cz, original in Czech, The Reference Frame, June 6, 2017

<https://motls.blogspot.com/2017/06/in-future-people-will-marvel-how.html?m=1>

“Orwell was an early thinker who noted that certain ideas are so silly that only intellectuals may believe them.”

*[SEPP Comment: Interviewed before Trump made his decision on the Paris Agreement.]*

### **The Anti-Social Cost of the Climate Crusade**

By Steven Hayward, Power Line, June 7, 2017 [H/t Timothy Wise]

<http://www.powerlineblog.com/archives/2017/06/the-anti-social-cost-of-the-climate-crusade.php>

Link to paper: The Private Benefit of Carbon and its Social Cost Working Paper

By Richard Tol, University of Sussex

<https://www.sussex.ac.uk/webteam/gateway/file.php?name=wps-07-2017.pdf&site=24>

Abstract: “The private benefit of carbon is the value, at the margin, of the energy services provided by the use of fossil fuels. It is the weighted average of the price of energy times the carbon dioxide emission coefficient, with energy used as weights. The private benefits is here estimated, for the first time, at \$411/tCO<sub>2</sub>. The private benefit is lowest for coal use in industry and highest for residential electricity; it is lowest in Kazakhstan and highest in Norway. The private benefit of carbon is much higher than the social cost of carbon.”

### ***Defending the Orthodoxy***

**The climate crisis**

By Vinod Thomas, Brookings, June 5, 2017

[https://www.brookings.edu/blog/future-development/2017/06/05/the-climate-crisis/?utm\\_campaign=Brookings%20Brief&utm\\_source=hs\\_email&utm\\_medium=email&utm\\_content=52806946](https://www.brookings.edu/blog/future-development/2017/06/05/the-climate-crisis/?utm_campaign=Brookings%20Brief&utm_source=hs_email&utm_medium=email&utm_content=52806946)

[https://www.brookings.edu/blog/future-development/2017/06/05/the-climate-crisis/?utm\\_campaign=Brookings%20Brief&utm\\_source=hs\\_email&utm\\_medium=email&utm\\_content=52806946](https://www.brookings.edu/blog/future-development/2017/06/05/the-climate-crisis/?utm_campaign=Brookings%20Brief&utm_source=hs_email&utm_medium=email&utm_content=52806946)

*[SEPP Comment: The CO<sub>2</sub> v Global annual mean surface-air temperature change graph gives the impression of a 10° C rise in temperatures since 1959, which is absurd.]*

### ***Questioning the Orthodoxy***

## **17 New Scientific Papers Dispute CO2 Greenhouse Effect As Primary Explanation For Climate Change**

By Kenneth Richard, No Tricks Zone, June 8, 2017

<http://notrickszone.com/2017/06/08/17-new-scientific-papers-dispute-co2-greenhouse-effect-as-primary-explanation-for-climate-change/#sthash.hPcqfYIW.dpbs>

## **Clive James: Climate Alarmists Won't Admit They Are Wrong**

By Clive James, The Australian, Via GWPF, June 4, 2017

<http://www.thegwpf.com/clive-james-climate-alarmists-wont-admit-they-are-wrong/>

“Actually, a more illustrative starting point for the theme of the permanently imminent climatic apocalypse might be taken as August 3, 1971, when The Sydney Morning Herald announced that the Great Barrier Reef would be dead in six months.”

## **End Game of Climate Wars: Clive James discusses how it plays out (slowly)**

By Jo Nova, Her Blog, June 3, 2017

<http://joannnova.com.au/2017/06/end-game-of-climate-wars-clive-james-discusses-how-it-plays-out-slowly/>

*[SEPP Comment: The false “predictions” will continue.]*

## ***Questioning the Orthodoxy -- Decarbonisation***

### **The Deplorable Truth about Decarbonization**

By Alan Carlin, Carlin Economics and Science, June 7, 2017

<http://www.carlineconomics.com/archives/3682>

## **Decarbonisation is a miserable fantasy which hurts the planet and makes us all poorer**

By Nigel Lawson, Telegraph, UK, Via GWPF, June 2, 2017

<http://www.thegwpf.com/nigel-lawson-decarbonisation-is-a-miserable-fantasy/>

## **Direct Use of Natural Gas: Unshackle Efficiency from Obama's 'Deep Decarbonization' (Part I)**

By Mark Krebs and Tom Tanton, Master Resource, June 7, 2017

<https://www.masterresource.org/deep-decarbonization-electricity-for-gas-mandates/direct-use-gas-1/>

*[SEPP Comment: Natural gas is “clean” for generating electricity, but “unclean” for other uses such as heating?]*

## **Direct Use of Natural Gas: Unshackle Efficiency from Obama's 'Deep Decarbonization' (Part II)**

By Mark Krebs and Tom Tanton, Master Resource, June 8, 2017

<https://www.masterresource.org/deep-decarbonization-electricity-for-gas-mandates/direct-use-gas-ii/>

## ***After Paris!***

### **Paris Accord: QTIIPS**

By Judith Curry, Climate Etc. June 4, 2017

<https://judithcurry.com/2017/06/04/paris-accord-qtiips/#more-23104>

“QTIIPS stands for Quantitatively Trivial Impact + Intense Political Symbolism.”

## ***Change in US Administrations***

## **Scott Pruitt: Paris Climate Agreement Would Have Driven More ‘Regulation Through Litigation’**

By John Hayward, Breitbart, June 5, 2017

<http://www.breitbart.com/radio/2017/06/05/pruitt-paris-climate-agreement-driven-regulation-litigation/>

## **Obama’s Decisions Doomed The Paris Climate Accord To Failure In The US, Experts Say**

By Michael Bastasch, Daily Caller, June 3, 2017

<http://dailycaller.com/2017/06/03/obamas-decisions-doomed-the-paris-climate-accord-to-failure-in-the-us-experts-say/>

## ***Change in US Administrations -- Favor Let Science Do The Talking...***

By Donn Dears, Power For USA, June 9, 2017

<http://www.powerforusa.com/2017/06/09/let-science-do-the-talking/>

## **Believe Me, You Don't Have To Worry About China Seizing "Climate Leadership"**

By Francis Menton, Manhattan Contrarian, June 8, 2017

<http://manhattancontrarian.com/blog/2017/6/8/believe-me-you-dont-have-to-worry-about-china-seizing-climate-leadership>

*[SEPP Comment: The Manhattan attorney is not impressed by China’s leadership in wind.]*

## **U.S. States Defy Trumps Climate Pact Withdrawal - promise compliance - will suffer**

By Alejandro Lazo, ICECAP, June 4, 2017

[http://icecap.us/index.php/go/icing-the-hype/us\\_states\\_defy\\_trumps\\_climate\\_pact\\_withdrawal\\_promise\\_compliance\\_will\\_suffe/](http://icecap.us/index.php/go/icing-the-hype/us_states_defy_trumps_climate_pact_withdrawal_promise_compliance_will_suffe/)

## **Donald Trump is right to ditch the Paris Agreement**

By Rupert Darwall, The Spectator, June 2, 2017

<https://blogs.spectator.co.uk/2017/06/donald-trump-right-ditch-paris-agreement/>

Via GWPF:

<http://www.thegwpf.com/rupe-darwall-why-trump-is-right-to-ditch-the-paris-agreement/>

## **Trump Was Right to Leave the Paris Agreement. Why He Shouldn’t Have Had to Withdraw in the First Place.**

By Brett Schaefer, The Daily Signal, June 8, 2017 [H/t Timothy Wise”

<http://dailysignal.com/2017/06/08/trump-right-leave-paris-agreement-shouldnt-withdraw-first-place/>

Link to State Department Internal Guidance – Circular 175 Procedure:

<https://www.state.gov/s/l/treaty/c175/>

“There are two kinds of Circular 175 requests. One calls for the approval of full powers to sign treaties that the President will send to the Senate for advice and consent to ratification. Since under international law full powers may be issued only by heads of State and Foreign Ministers, approval of full powers is not a delegable function.”

Link to a study: Treaties and other International Agreements: The Role of the United States Senate

By the Senate Foreign Relations Committee, 2001

<https://www.gpo.gov/fdsys/pkg/CPRT-106SPRT66922/pdf/CPRT-106SPRT66922.pdf>



**The Paris Climate Deal Was A 'Fraud' And A 'Sham' ... Until Trump Decided To Ditch It**  
Editorial, IBD, June 2, 2017 [H/t Timothy Wise]

<http://www.investors.com/politics/editorials/the-paris-climate-deal-was-a-fraud-and-a-sham-until-trump-decided-to-ditch-it/>

***Change in US Administrations -- Opposed***

**Paris Isn't the Only Clean Energy Pact the U.S. Is Fleeing**

The White House's deep proposed cuts to energy R&D could cede leadership to China, and derail the international Mission Innovation partnership.

By James Temple, Technology Review, June 7, 2017

<https://www.technologyreview.com/s/608032/paris-isnt-the-only-clean-energy-pact-the-us-is-fleeing/?set=608044>

Link: Goals of Mission Innovation

<http://mission-innovation.net/the-goal/>

and Second Mission Innovation Ministerial

<http://mission-innovation.net/our-work/mi-2/>

**One Chart Suggests Trump May Be Wrong About Emissions and GDP**

By Brian Eckhouse and Eric Roston, Bloomberg, June 8, 2017

<https://www.bloomberg.com/news/articles/2017-06-07/one-chart-suggests-trump-may-be-wrong-about-emissions-and-gdp>

*[SEPP Comment: What happens in California as its economy adjusts to higher electricity prices with more solar and wind and the closing of nuclear and fossil fuel producers is what is important.]*

**Quitting the Paris Climate Pact in Historical Perspective**

By Jay Hakes, Real Clear Energy, June 06, 2017

[http://www.realclearenergy.org/articles/2017/06/06/quitting\\_the\\_paris\\_climate\\_pact\\_in\\_historical\\_perspective\\_110232.html](http://www.realclearenergy.org/articles/2017/06/06/quitting_the_paris_climate_pact_in_historical_perspective_110232.html)

*[SEPP Comment: Contrary to the energy historian's view, believing energy models that the world will run out of oil in the 20<sup>th</sup> century resulted in policies as bad as the ones by Richard Nixon. The policy decision by Mr. Trump is based on evidence, not speculation.]*

**Trump's Paris exit: climate science denial industry has just had its greatest victory**

Trump's confirmed withdrawal from the United Nation's Paris climate deal shows it's time to get to grips with the climate science denial industry

By Graham Readfearn, Guardian, UK, June 2, 2017

<https://www.theguardian.com/environment/planet-oz/2017/jun/02/trumps-paris-exit-climate-science-denial-industry-has-just-had-its-greatest-victory>

**Can the Paris Agreement Survive?**

By David Hone, Energy Collective, June 5, 2017

<http://www.theenergycollective.com/davidhone/2405976/can-paris-agreement-survive>

**Donald Trump and the Decline of the Ideas Industry**

By James Joyner, Real Clear World, June 7, 2017

[http://www.realclearworld.com/articles/2017/06/07/ideas\\_industry\\_daniel\\_drezner\\_book\\_review\\_112376.html](http://www.realclearworld.com/articles/2017/06/07/ideas_industry_daniel_drezner_book_review_112376.html)

## **Robert Samuelson: The Messy Reality Of Global Warming**

By Robert J. Samuelson, IBD, June 5, 2017 [H/t Timothy Wise]

<http://www.investors.com/politics/columnists/robert-samuelson-the-messy-reality-of-global-warming/>

## ***Change in US Administrations -- Neutral***

### **American exceptionalism**

By Martin Livermore, The Scientific Alliance, June 9, 2017

<http://scientific-alliance.org/scientific-alliance-newsletter/american-exceptionalism-0>

“If known waverers are tempted to follow Donald Trump’s lead and other countries are perhaps spurred into action by economic realities, the culmination of years of negotiation could be fatally compromised. No matter that it may make little or no difference to levels of CO<sub>2</sub> in the atmosphere, the loss of support for the Paris Agreement from more than a handful of countries could mark the high water mark of international consensus on climate change policy. The present complex, unwieldy and ineffectual top-down policies may have effectively had their day.”

## **Public Opinion and Trump's Decision on the Paris Agreement**

By Frank Newport, Gallup, June 2, 2017 [H/t Timothy Wise]

[http://www.gallup.com/opinion/polling-matters/211682/public-opinion-trump-decision-paris-agreement.aspx?g\\_source=WWWV7HP&g\\_medium=topic&g\\_campaign=tiles](http://www.gallup.com/opinion/polling-matters/211682/public-opinion-trump-decision-paris-agreement.aspx?g_source=WWWV7HP&g_medium=topic&g_campaign=tiles)

## ***Seeking a Common Ground***

### **Epstein vs. Harvard Law’s Freeman: ‘The Moral Case for Fossil Fuels’ (Energy Law Journal exchange is prime time—and it’s Freeman’s turn)**

By Robert Bradley Jr, Master Resource, June 6, 2017

<https://www.masterresource.org/epstein-alex/epstein-vs-freeman-elj/>

*[SEPP Comment: The law professor’s arguments demonstrate ignorance of the subject.]*

## **Energy Cost Is Why We Disagree About Climate Policy**

By John Constable, GWPF June 4, 2017

<http://www.thegwpf.com/energy-cost-is-why-we-disagree-about-climate-policy/>

## ***Review of Recent Scientific Articles by CO<sub>2</sub> Science***

### **Elevated CO<sub>2</sub> Helps Alleviate the Challenge of Rising Seas for Salt Marshes**

Reef, R., Spencer, T., Möller, I., Lovelock, C.E., Christie, E.K., McIvor, A.L., Evans, B.R. and Tempest, J.A. 2017. The effects of elevated CO<sub>2</sub> and eutrophication on surface elevation gain in a European salt marsh. *Global Change Biology* 23: 881-890. June 5, 2017

<http://www.co2science.org/articles/V20/jun/a5.php>

## **Spring and Autumn Migrations of Long-Distance-Flying Birds**

Miles, W.T.S., Bolton, M., Davis, P., Dennis, R., Broad, R., Robertson, I., Riddiford, N.J., Harvey, P.V., Riddington, R., Shaw, D.N., Parnaby, D. and Reid, J.M. 2017. Quantifying full phenological event distributions reveals simultaneous advances, temporal stability and delays in spring and autumn migration timing in long-distance migratory birds. *Global Change Biology* 23: 1400-1414. June 5, 2017

<http://www.co2science.org/articles/V20/jun/a4.php>

## **Wildfires of the United States: Human or Climate-Caused?**

Balch, J.K., Bradley, B.A., Abatzoglou, J.T., Nagy, R.C., Fusco, E.J. and Mahood, A.L. 2017. Human-started wildfires expand the fire niche across the United States. *Proceedings of the U.S. National Academy of Science* **114**: 2946-2951. June 2, 2017

<http://www.co2science.org/articles/V20/jun/a2.php>

“The six scientists report that ‘humans have vastly expanded the spatial and seasonal ‘fire niche’ in the coterminous United States, accounting for [1] 84% of all wildfires and [2] 44% of total area burned,’ that (3) ‘during the 21-year time period, the human-caused fire season was three times longer than the lightning-caused fire season,’ and that (4) humans ‘added an average of 20,000 wildfires per year across the United States.’”

### ***Measurement Issues -- Surface***

#### **Hiatus Studies Drive Climate Research**

By David Whitehouse, GWPF, June 2, 2017

<http://www.thegwgf.com/hiatus-studies-drive-climate-research/>

### ***Changing Weather***

#### **The Most Important Weather Forecast of All-Time:: D-Day, June 6, 2017**

By Paul Dorian, Vencore Weather, June 5, 2017

<https://www.vencoreweather.com/blog/2017/6/5/1030-am-the-most-important-weather-forecast-of-all-time-d-day-june-6-1944>

#### **CFAN’s forecast for the 2017 Atlantic hurricane season**

By Judith Curry, Climate Etc. June 8, 2017

<https://judithcurry.com/2017/06/08/cfans-forecast-for-the-2017-atlantic-hurricane-season/#more-23110>

*[SEPP Comment: Curry’s company using a new method for predicting accumulated Cyclone Energy (ACE) and the number of US landfalls for this hurricane season.]*

#### **The Incredible Heat Of June 9, 1933**

By Tony Heller, The Deplorable Climate Science Blog, June 9, 2017

<https://realclimatescience.com/2017/06/the-incredible-heat-of-june-9-1933/>

### ***Changing Climate***

#### **A Holocene Temperature Reconstruction Part 3: The NH and Arctic**

By Andy May, WUWT, June 8, 2017

<https://wattsupwiththat.com/2017/06/08/a-holocene-temperature-reconstruction-part-3-the-nh-and-arctic/>

*[SEPP Comment: Part 1 & 2 may be needed to understand part 3.]*

#### **BOM: Hiding Australia’s Very Hot Past**

By Tony Heller, The Deplorable Climate Science Blog, June 9, 2017

<https://realclimatescience.com/2017/06/bom-hiding-australias-very-hot-past/>

### ***Changing Seas***

#### **Sea Levels Are Stable To Falling At About Half Of The World’s Tide Gauges**

By Kenneth Richard, No Tricks Zone, June 5, 2017

<http://notrickszone.com/2017/06/05/sea-levels-are-stable-to-falling-at-about-half-of-the-worlds-tide-gauges/#sthash.1ifmrgrc.dpbs>

*[SEPP Comment: Sea level rise is not a problem in many places.]*

### ***Changing Cryosphere – Land / Sea Ice***

#### **Breakup of sea ice on track in Canada as critical feeding period for polar bears ends**

By Susan Crockford, Polar Bear Science, June 8, 2017

<https://polarbearscience.com/2017/06/08/breakup-of-sea-ice-on-track-in-canada-as-critical-feeding-period-for-polar-bears-ends/>

### ***Changing Earth***

#### **Massive craters formed by methane blow-outs from the Arctic sea floor**

By Staff Writers, Oslo, Norway (SPX), Jun 05, 2017

[http://www.spacedaily.com/reports/Massive\\_craters\\_formed\\_by\\_methane\\_blow\\_outs\\_from\\_the\\_Arctic\\_sea\\_floor\\_999.html](http://www.spacedaily.com/reports/Massive_craters_formed_by_methane_blow_outs_from_the_Arctic_sea_floor_999.html)

[SEPP Comment: Was it the release of pressure from the ice that melted that created the blow-outs 12,000 years ago?"]

### ***Acidic Waters***

#### **Stony corals more resistant to climate change than thought, Rutgers study finds**

By Staff Writers, New Brunswick NJ (SPX), Jun 05, 2017

[http://www.terradaaily.com/reports/Stony\\_corals\\_more\\_resistant\\_to\\_climate\\_change\\_than\\_thought\\_Rutgers\\_study\\_finds\\_999.html](http://www.terradaaily.com/reports/Stony_corals_more_resistant_to_climate_change_than_thought_Rutgers_study_finds_999.html)

### ***Agriculture Issues & Fear of Famine***

#### **MIT Researcher: Glyphosate Will Cause Half Of All Children To Be Autistic By 2025. Yeah, Sure.**

By Josh Bloom, ACSH, June 7, 2017

<http://www.acsh.org/news/2017/06/07/mit-researcher-glyphosate-will-cause-half-all-children-be-autistic-2025-yeah-sure-11337>

### ***Questioning European Green***

#### **Scrap The Act [UK's Climate Change Act]**

By Paul Homewood, Not a Lot of People Know That, June 5, 2017

<https://notalotofpeopleknowthat.wordpress.com/2017/06/05/scrap-the-act/>

### **50% RE in the UK – the Ugly Facts**

By Euan Mearns, Energy Matters, June 9, 2017

<http://euanmearns.com/50-re-in-the-uk-the-ugly-facts/#more-18511>

### **EU's emissions in 2015 rose after five years**

By John Bairstow, Energy Live News, June 5, 2017 [H/t GWPF]

<http://www.energylivenews.com/2017/06/05/eus-emissions-in-2015-rose-after-five-years/>

[SEPP Comment: Massive reductions by the UK were not enough.]

### **Green Madness: Energy Bills Rise €30 to Pay for EU Green Energy Targets**

Editorial, The Times, June 5, 2017

<http://www.thegwpcf.com/madness-energy-bills-rise-e30-to-pay-for-eu-green-energy-targets/>

[SEPP Comment: GWPF inserted a cartoon: "Why does wind power still need subsidies after 2000 years of development?"]

### ***Questioning Green Elsewhere***

## **A Looming Disaster in Energy Security**

Renewables will provide, optimistically, 10 to 20 per cent of global energy by 2035. There is no prospect of seriously reducing fossil fuel emissions without an accompanying fall in global standards of living directly implied by large reductions in per capita energy use.

By Philip Hopkins, Quadrant, AU, June 2017

<http://quadrant.org.au/magazine/2017/06/looming-disaster-energy-security/>

*[SEPP Comment: Questioning energy policies in Australia and Germany on costs and accomplishing stated goals.]*

## **Green Jobs**

### **There's Too Much Focus on Energy Jobs Right Now**

It would be better to evaluate energy policy by looking through more economic lenses.

By Justin Fox, Bloomberg, June 5, 2017

<https://www.bloomberg.com/view/articles/2017-06-05/why-we-talk-about-energy-jobs-so-much>

## **Funding Issues**

### **Exclusive: U.S. aid agency under scrutiny for loans in Chile**

By Gram Slattery, Reuters, May 29, 2017

<http://www.reuters.com/article/us-chile-renewables-idUSKBN18P11T>

### **Report: Fossil Fuel Divestment Would Cost Trillions**

Divestment could lead to reduced payments to pensioners, taxpayer bailouts

By: Brent Scher, Washington Free Beacon, June 8, 2017 [H/t Timothy Wise]

<http://freebeacon.com/issues/report-fossil-fuel-divestment-cost-pension-funds-trillions/>

Link to report: Fossil Fuel Divestment and Public Pension Funds

By Fischer, Fiore, and Kendall, Compass Lexecon, June 2017

[http://freebeacon.com/wp-content/uploads/2017/06/Divestment-and-Public-Pension-Funds\\_FINAL.pdf](http://freebeacon.com/wp-content/uploads/2017/06/Divestment-and-Public-Pension-Funds_FINAL.pdf)

## **The Political Games Continue**

### **Why No Mention of Enterprise and Innovation?**

By Matt Ridley, The Rational Optimist, June 5, 2017

<http://www.rationaloptimist.com/blog/1987-and-2017-compared/>

Link to NASA Study: Carbon Dioxide Fertilization Greening Earth, Study Finds

By Staff Writers, NASA, April 26, 2017

<https://www.nasa.gov/feature/goddard/2016/carbon-dioxide-fertilization-greening-earth>

Link the paper: Greening of the Earth and its drivers

By Zaichun Zhu, et al. Nature Climate Change, April 25, 2017

<http://www.nature.com/nclimate/journal/v6/n8/full/nclimate3004.html>

*[SEPP Comment: On the British election.]*

## **Litigation Issues**

### **Exxon fights 'reckless and false' climate charge by New York AG**

By Timothy Cama, The Hill, June 9, 2017

<http://thehill.com/policy/energy-environment/337183-exxon-fights-reckless-and-false-climate-charge-by-new-york-ag>

## **Subsidies and Mandates Forever**

### **Solar Could Save Pretend Lives, But It Costs A Lot Of Real Money**

By Hank Campbell, ACSH, June 2, 2017

<http://www.acsh.org/news/2017/06/02/solar-could-save-pretend-lives-it-costs-lot-real-money-11372>

“Obviously that employment [in solar] would collapse if the government-mandated financial cushion dries up, just like ethanol or wind, and the new administration is looking at money as money, not as ideology. When it comes to money as money, coal generates it while solar is a big drain.”

*[SEPP Comment: Exposing the imaginary death statistics of the EPA.]*

### **Electricity Subsidies in Australia - The Facts.**

By Geoff Brown, The Australian Climate Sceptics Blog, June 2, 2017

<http://theclimatescepticsparty.blogspot.com.au/2017/06/electricity-subsidies-in-australia-facts.html>

*[SEPP Comment: Graph showing Australian subsidies per unit of electricity by source, 2015-2016.]*

### ***Energy Issues – Non-US***

#### **The Real Reason Trump Left the Paris Agreement**

By Mark Mills, Fortune, June 4, 2017

<http://fortune.com/2017/06/04/paris-climate-agreement-what-is-trump-deal-accord/>

### ***Washington’s Control of Energy***

#### **America First with Alaskan Oil**

By Fritz Pettyjohn, American Thinker, June 6, 2017

[http://www.americanthinker.com/articles/2017/06/america\\_first\\_with\\_alaskan\\_oil.html](http://www.americanthinker.com/articles/2017/06/america_first_with_alaskan_oil.html)

“Fritz Pettyjohn is a former Alaska state senator and House minority leader.”

#### **Oil Starts Flowing Through the Dakota Access Pipeline**

By Staff Writers, The American Interest, June 4, 2017

<https://www.the-american-interest.com/2017/06/04/oil-starts-flowing-through-the-dakota-access-pipeline/>

### ***Oil and Natural Gas – the Future or the Past?***

#### **Shale 2.0 vs. OPEC 2.0**

By Wael Mahdi, Arab News, June 6, 2017

<http://www.arabnews.com/node/1110731>

### ***Return of King Coal?***

#### **Japanese technology squeezes more power out of coal**

New plant touts 30% greater generating efficiency with 30% CO2 reduction

By Ken Sakakibara, Nikkei Asian Review, June 6, 2017 [H/t GWPF]

<http://asia.nikkei.com/Tech-Science/Tech/Japanese-technology-squeezes-more-power-out-of-coal>

### ***Alternative, Green (“Clean”) Solar and Wind***

#### **To Live and Breath[e] in Beijing**

By Greg Rehmke, Master Resource, June 5, 2017

<https://www.masterresource.org/china-international/live-breath-beijing/>

“The 92,000 Gansu Wind Farm turbines have to be paid for and connected to China’s electricity grid.”

## **See “It Can Power a Small Nation. But This Wind Farm in China Is Mostly Idle”**

B Javier Hernandez, NYT, Jan 1, 2017

<https://www.nytimes.com/2017/01/15/world/asia/china-gansu-wind-farm.html? r=0>

“On the edge of the Gobi Desert, the Jiuquan Wind Power Base stands as a symbol of China’s quest to dominate the world’s renewable energy market. With more than 7,000 turbines arraigned in rows that stretch along the sandy horizon, it is one of the world’s largest wind farms, capable of generating enough electricity to power a small country.”

## ***Alternative, Green (“Clean”) Energy -- Other***

### **New Geothermal Project Helps Create**

Clean Energy Future for Los Angeles

Project Provides Around-the-Clock Renewable Energy for 208,000 Homes;

Reduces Greenhouse Gas Emissions Equivalent to Taking 135,000 Cars off the Road

By Staff Writers, LA Department of Water and Power, June 1, 2017 [H/t Toshio Fujita]

<http://www.ladwpnews.com/go/doc/1475/2922762/-New-Geothermal-Project-Helps-Create-Clean-Energy-Future-for-Los-Angeles>

[SEPP Comment: Expected 95% of capacity, no mention of cost.]

## ***Alternative, Green (“Clean”) Vehicles***

### **Cost of Elon Musk's Dream Much Higher Than He and Others Imagine**

By Brian Rogers, Real Clear Energy, June 8, 2017

[http://www.realclearenergy.org/articles/2017/06/08/cost\\_of\\_elon\\_musks\\_dream\\_much\\_higher\\_than\\_he\\_and\\_others\\_imagine\\_110233.html](http://www.realclearenergy.org/articles/2017/06/08/cost_of_elon_musks_dream_much_higher_than_he_and_others_imagine_110233.html)

### **Electric car industry wants subsidies to grow Australian market (current national sales = 4 cars a week)**

By Jo Nova, Her Blog, June 7, 2017

<http://joannenova.com.au/2017/06/electric-car-industry-wants-subsidies-to-grow-australian-market-current-national-sales-4-cars-a-week/>

“People buy cars to get places. Governments “buy” cars to change the weather.”

## ***California Dreaming***

### **California's Bogus 'Renewable Energy'**

By Norman Rogers, American Thinker, June 9, 2017

[http://www.americanthinker.com/articles/2017/06/californias\\_bogus\\_renewable\\_energy.html](http://www.americanthinker.com/articles/2017/06/californias_bogus_renewable_energy.html)

[SEPP Comment: Why renewable power claims frequently come from “cooking the books” – even by government entities.]

### **California Once Again Tops the U.S. Clean Tech Leadership Index... But Falls a Penny Short of the Highest Electricity Prices in the Lower 48**

Guest post by David Middleton, WUWT, June 7, 2017

<https://wattsupwiththat.com/2017/06/07/california-once-again-tops-the-u-s-clean-tech-leadership-index-but-falls-a-penny-short-of-the-highest-electricity-prices-in-the-lower-48/>

[SEPP Comment: Cheap hydro and nuclear power balance the high cost of new renewables in California – with the nuclear being phased out.]

## ***Health, Energy, and Climate***

### **Climate Change does not Cause Asthma**



By Daniel John Sobieski, American Thinker, June 5, 2017  
[http://www.americanthinker.com/articles/2017/06/climate\\_change\\_does\\_not\\_cause\\_asthma.html](http://www.americanthinker.com/articles/2017/06/climate_change_does_not_cause_asthma.html)

***Environmental Industry***

**Frankenstein’s Anti-Science Message Was Always Wrong**

A curious connection between the Gothic novel and Lucretius

By Matt Ridley, The Rational Optimist, June 5, 2017

<http://www.rationaloptimist.com/blog/frankenstein-and-lucretius/>

***Other Scientific News***

**Rigor Mortis: Wasted Billions on Sloppy Science**

By Anjana Ahuja, Financial Times, Via GWPF, June 6, 2017

<http://www.thegwpf.com/rigor-mortis-wasted-billions-on-sloppy-science/>

**Why we can't trust academic journals to tell the scientific truth**

Academic journals don't select the research they publish on scientific rigour alone. So why aren't academics taking to the streets about this?

By Julian Kirchherr, The Guardian, UK, June 6, 2017

<https://www.theguardian.com/higher-education-network/2017/jun/06/why-we-cant-trust-academic-journals-to-tell-the-scientific-truth>

***Other News that May Be of Interest***

**Machines Can't Learn (Universals): The Abacus As Brain Part II**

By William Briggs, His Blog, June 7, 2017

<http://wmbriggs.com/post/21739/>

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**BELOW THE BOTTOM LINE:**

**Meet Dr Ollie, The World's Smartest Dog!**

By Paul Homewood, Not a Lot of People Know That, June 8, 2017

<https://notalotofpeopleknowthat.wordpress.com/2017/06/08/meet-dr-ollie-the-worlds-smartest-dog/>

“...sits on the editorial boards of seven international medical journals and has just been asked to review a research paper on the management of tumours.”

**Window closing**

By Staff Writers, Climate Change Predictions, June 9, 2017

<http://climatechangepredictions.org/uncategorized/8234>

“The chief UN climate negotiator has warned the world’s political leaders they must ‘act on the information provided by science’ as they head to the Bali climate negotiations next month and foreshadowed that billions of dollars will need to be invested in clean energy.

“Mr de Boer said there was a ‘window of opportunity of just **10 to 15 years to halt the march to dangerous climate change.**” Sydney Morning Herald, 21 Nov 2007 [Boldface added]

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**ARTICLES:**

**1. Trump Skips Climate Church**

Paris exists to provide an imprimatur to what politicians would do anyway.

By Holman W. Jenkins, Jr., WSJ, June 2, 2017

<https://www.wsj.com/articles/trump-skips-climate-church-1496431295?tesla=y>



SUMMARY: The columnist writes:

*“The business case for the Paris agreement has nothing to do with climate change. It goes like this: It is better to be part of any confab than outside of it. Like saluting the flag or bowing your head in church, there is no cost to being insincere, but there is a cost to not going along.*

*“Let us understand something: 195 countries will not be dragged kicking and screaming to sign any agreement that imposes a cost on them. Such deals exist only because they provide an international imprimatur to what politicians were going to do anyway.*

*“The oil countries like Saudi Arabia and Norway signed. They plan to keep producing oil. India and China plan to grow energy consumption until it is similar to the per capita consumption of the developed countries, at which point it will level off.*

*“The U.S. and Europe intend to keep subsidizing green energy as long as domestic voters give them permission to do so, because the whole point of being in office is to redirect resources to interest groups best able to reward politicians for doling out the goodies.*

*“The Paris countries agreed to meet certain emissions targets, and claimed an intent to hold a planetary temperature increase to less than 2 degrees Celsius.*

*“Not only are the emission targets unenforceable, they have no intelligible relation to the temperature goal according to the very iffy science. By the shot-in-the-dark estimates of the Intergovernmental Panel on Climate Change, it’s even possible the rest of the century will bring little warming anyway.*

*“And that’s good. Because the unenforceable cuts agreed to in Paris would be a rounding error even if carried out.*

*“In the 30 years since global warming became a daily concern of the newspapers, one lesson has been reliably demonstrated for policy participants: There is no appetite in the body politic for the kinds of energy taxes and prohibitions needed to make a meaningful change in atmospheric CO<sub>2</sub>*

*“We won’t dwell on the media hysteria since the Trump decision, or why many of you, dear readers, in defiance of your own reason, will participate in the hysteria even when you know better. Human beings are social animals. When a mob is forming, we experience high anxiety if we’re not part of it.*

*“Agreements like Paris arguably aim at the wrong target anyway. Only when technology can meet mankind’s energy demand at competitive cost will low-carbon energy prevail. Governments would be wise to invest in basic energy research rather than throwing money at energy technologies that are viable only as long as the subsidies keep flowing. But the latter is what brings in the political bacon.*

*“Oh well. Hypocrisy is the universal solvent of social relations. This also explains the other big climate story of the day, which reporters have given themselves hypoxia trying to inflate the significance of. We’re referring to the vote by 62% of Exxon shareholders, led by giant funds Vanguard, Fidelity and BlackRock, to ask the company to explain how the Paris temperature target would affect its business.*

*“For 30 years there has been push-and-pull in politics over climate change. During every nanosecond of that time, at least while markets were open, investors were repricing energy shares in light of the possibility of climate change legislation.*

*“Exxon has nothing new or useful to tell investors in this regard.”*

*“‘Our patience is not infinite,’ huffed a statement by BlackRock, the \$5.4 trillion Wall Street fund, as it voted for Exxon’s climate penance.*

*“This gesture, of surpassing meaninglessness, is a case of one prominent institution trying to buff up its reputation for church attendance at the expense of another.*

*“And yet, regardless of Mr. Trump’s Paris decision, only one large national economy has been reporting sizable emissions declines, thanks to fracking. The same economy may soon also be able to take credit for slowing China’s prodigious emissions growth thanks to natural gas exports to displace Chinese coal. That country is the U.S. under the unthinkable monster Donald Trump. Whatever evolution toward a lower-carbon energy system takes place in the future, it will also certainly be driven overwhelmingly by technology and markets, not policy*

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## **2. An Energy Shock from the High Seas**

Global energy market could be slammed by a planned change to maritime fuel rules

By Spencer Jakab, WSJ, June 6, 2017

<https://www.wsj.com/articles/an-energy-shock-from-the-high-seas-1496774867>

SUMMARY: The author discusses little known international agreement that may significantly boost prices of goods in an international economy:

*“Circle January 2020 on your calendar for what could be a major disruption to the energy market and a jolt to the global economy.*

*“The origin of the problem isn’t some oil cartel’s machinations, a looming war or even a technological shift—it is a bureaucratic body that few people have heard of: the International Maritime Organization. Just 30 months from now the cargo vessels that are the lifeblood of global trade will be required to cut the sulfur content in their fuel from 3.5% to 0.5%.*

*“Ships move more than 10 billion tons of cargo a year and do it far more efficiently than road or rail, but it comes at a high cost in terms of overall pollution because ships use fuel oil, which is just about the cheapest, dirtiest stuff to come out of refineries. About 9% of all sulfur dioxide emitted globally comes from ships, contributing to acid rain and many premature deaths annually. Even the new cap is 500 times the sulfur content of most road diesel.*

*“But the sudden cut may have a significant global impact. “The shipping industry sees this as a shipping problem, and it isn’t,” said Martin Tallett, president of refining specialist EnSys Energy, which has studied the issue for years.*

*“While standards have changed for many fuels, the rapid nature of the switch means that, if shippers fully comply, there could be price spikes. Ships that currently use cheap high sulfur fuel oil will have to switch to some other source higher up in the product slate that comes out of*

refineries. Even with significant investment, refiners may not be ready and ships may have to burn more expensive marine diesel.

*“Marine diesel affects land diesel which affects jet fuel which affects gasoline, ’ explains Mr. Tallett. That could cause the prices of those fuels to go up by 10% to 20%.*

*“The only solution may be to simply refine more oil, which means increasing overall demand, to get enough low-sulfur fuel out of the world’s refineries. The International Energy Agency worried about the impact in a February report, yet it assumes many ships will install marine scrubbers to clean the dirty fuel and that refiners will add units to reduce sulfur content—both expensive propositions.”*

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### **3. Scientists Find Oldest Known Specimens of the Human Species**

Remains found in Morocco date from about 300,000 years ago, about 100,000 older than any other fossils of Homo sapiens

By Robert Lee Hotz, WSJ, June 7, 2017

[https://www.wsj.com/articles/scientists-find-oldest-known-specimens-of-the-human-species-1496854801?mod=trending\\_now\\_3](https://www.wsj.com/articles/scientists-find-oldest-known-specimens-of-the-human-species-1496854801?mod=trending_now_3)

SUMMARY: The article begins with:

*“The bones of ancient hunters unearthed in Morocco are the oldest known specimens of the human species, potentially pushing back the clock on the origin of modern Homo sapiens, scientists announced Wednesday.*

*“Found among stone tools and the ashes of ancient campfires, the remains date from about 300,000 years ago, a time when the Sahara was green and several early human species roamed the world, the scientists said. That makes them about 100,000 years older than any other fossils of Homo sapiens—the species to which all people today belong.*

*““These dates were a big wow, ’ said anthropologist Jean-Jacques Hublin at the Max Planck Institute for Evolutionary Biology in Leipzig, Germany. He led an international team of scientists who reported the discovery Wednesday in Nature. ‘This material represents the very roots of our species—the very oldest Homo sapiens found in Africa or anywhere.’*

*Until now, most researchers believed that modern humankind emerged gradually from a population centered in East Africa around 200,000 years ago. Previous discoveries of early Homo sapiens fossils have been concentrated at sites in Ethiopia.*

*The fossil discovery at Jebel Irhoud near Marrakesh in North Africa, however, suggests that early humans had already spread across most of Africa by then.*

*“What’s really neat about this discovery is that you now have evidence of modern Homo sapiens across Africa, about as far from sites in East Africa as you can get,” said anthropologist Bernard Wood at George Washington University’s Center for the Advanced Study of Human Paleobiology, who wasn’t involved in the find.*

*As early experiments in the human form, these ancestors had quite modern-looking facial features, but relatively primitive skulls, suggesting that the cognitive capacities of modern brains had yet to take shape, the scientists said.*

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