

THE DISCONNECT

European green energy turns into a nightmare. The United States is next.

By Michael S. Coffman, Ph.D.

“The European Union is wracked by sovereign debt, budget deficits, monetary weakness, slow economic growth, trade deficits with the emerging economies, an aging population, and mass unemployment—but it has the supposedly proud role of world leader in Green Energy Transition.”

—Andrew McKillop, former energy analyst, Euro Commission

Despite strong early signs that green energy was a boondoggle, Europe dogmatically positioned itself to be the world’s leader in alternative energy. Its once shining hope was always disconnected from reality, doomed from the start. Benny Peiser is director of the Global Warming Policy Foundation in London. In the May 13, 2013,

edition of the *Financial Post*, he laid bare Europe’s cost of green energy:

“European consumers have subsidized renewable energy investors by a staggering 600 billion euros [\$776 billion] since 2004. Germany’s green transition alone may cost energy consumers up to a trillion euros by 2020.” The investors Peiser referenced represent the very big businesses so hated by progressives that live off the government largesse. Termed rent-seeking, they got fat off the taxpayers’ sweat. “This is the biggest wealth transfer in the history of modern Europe,” Peiser says, “from the poor to the rich.”

Europe’s failed 10-year experiment in wind and solar power is best represented by what has happened in Germany and England.

Germany

Following Japan’s Fukushima nuclear meltdown in March 2011, Germany was forced by its powerful progressive green lobby to close all nuclear generation plants. At the same time, Germany is still committed to producing 35 percent of its electricity from green energy (mostly solar) by 2020. To make up the energy shortfall created by the loss of nuclear and the inefficiency of green power, Germany is building 23 coal-generation plants.

These schizophrenic policies have no connection to reality. *Sunday Times*’ Philip Lambert, founder of Lambert Energy Advisory, laments: “Germany has spent more

than 150 billion euros [\$194 billion] in the past 10 years on its green experiment, and what has it led to? Higher [carbon] emissions.... They have more than 400 terawatt hours (TWh) of installed renewable capacity, *but its annual output is less than 70TWh*, which is why they have had this dash for coal to keep the lights on.” (Italics added)

Nearly half of the Eurozone’s installed solar power capacity is in Germany. By 2010, it had installed over one million rooftop solar systems by offering huge 20-year subsidies to home and business owners. As predicted by more rational minds, the policy also produced a subsidy obligation of more than 109 billion euros (\$140 billion). German electric-

ity rates climbed to the second highest in the world (Denmark is worst) and continue to climb to pay for green energy.

To stop the bleeding, Germany cut feed-in subsidies three times in 2011 and announced in early 2012 a complete phase-out by 2017. In late December 2011 and January 2012, Germany’s 1.1 million solar power systems generated almost no electricity due to short, overcast days. Critics had warned for years that it would happen before the first solar panel was installed, but their warnings were ignored.

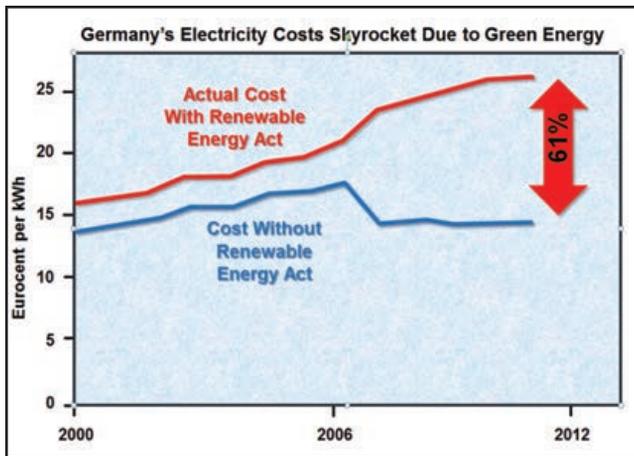
Calling solar power an exercise in “blind faith,” Germany’s flagship newspaper, *Der Spiegel*, criticized high subsidies for very poor return: “Solar farm operators and homeowners with solar panels on their roofs had collected more than eight billion euros [\$10.2 billion] in subsidies in 2011, but the electricity they generated made up only about three percent of the total power supply, and that at unpredictable times.”

It gets worse. “Because there are almost no storage options,” continues *Der Spiegel*, “excess energy has to be destroyed at substantial cost” when too much solar power is created. In other words, solar power in Germany simply does not work economically.

Electricity prices have jumped by 61 percent since Germany began to implement its alternative-energy policy. By early 2012, 15 percent of German families were living in energy or fuel poverty—defined as those families needing to spend more than 10 percent of the total household income on electricity and gas. Additionally, 600,000 low-income Germans are being cut off by



Because Germany is shutting down its nuclear generators and because solar and wind power are much more inefficient than promised, Germany is having to build 23 new coal-fired plants. This coal-fired power station is in Werdohl-Elverlingsen. SOURCE: Dr. G. Schmitz, used by permission under the Creative Commons Attribution-Share Alike License.



German electricity prices have increased by 61 percent compared to what they would have been if the German Renewable Energy Act had not passed and subsidizing solar and wind power became the nation's goal. SOURCE: Europe's Energy Portal, as used by EnergyFacts.org.

their power companies every year.

By mid-2012, Germany's eco-minister, Norbert Röttgen, was sacked by Chancellor Angela Merkel in an apparent shift in policy. On Oct. 25, 2012, *Die Welt* blasted her administration for woefully underestimating green energy cost: "Almost all predictions about the expansion and cost of German wind turbines and solar panels have turned out to be wrong—at least *by a factor of two, sometimes by a factor of five.*" (Italics added) The cost burden for consumers and industry of green energy...threatens the de-industrialization of Germany."

By December 2012, the spiraling cost of German energy caused Poland and the Czech Republic to totally ban all of Germany's green energy by redistributing their electrical grids regardless of consequences. It was the last straw. In January 2013, Germany announced it wouldn't wait until 2017; it would freeze and cap subsidies to green electricity producers immediately.

The people are angry and political reality (read: self-preservation and the upcoming September 2013 elections) finally trumped the death grip of progressive green ideology.

Great Britain

Like Germany, Britain's powerful green lobby forced the United Kingdom to maintain its expensive green policies. Unlike Germany, the U.K. put all its eggs in wind power. Like Germany, the U.K.'s disconnect from reality has cost it dearly. According to Danish economist and author Bjørn Lomborg, the U.K.'s wind power "is still 20 to 200 percent more expensive than the cheapest fossil-fuel options." And that doesn't include downtime for wind

turbines when the wind doesn't blow, which is about 75 percent of the time. "Britain's wind-power goals by 2020 could cost an additional 75 billion euros [\$120 billion]," warns Lomborg. "Carried to 2100, the benefits of this massive expenditure would postpone global warming a measly 10 days."

In addition to killing hundreds of thousands (maybe millions) of birds annually, wind turbines are ugly and noisy. Brits don't like them cluttering up the landscape, and, like solar, wind is not dependable. In 2012, wind supplied five percent of the U.K.'s electricity needs. On Dec. 21, 2010, when a windless high-pressure area stalled over a bitterly cold Britain, wind power dropped to 0.04 percent. According to a new study reported by the BBC on April 6, 2011: "Very low wind events are not confined to periods of high pressure in winter. They can occur at any time of the year." During each of

and below 10 percent of capacity over one third of the time. It is clear from this analysis that wind cannot be relied upon to provide any significant level of generation at any defined time in the future." The wind industry denied these numbers even though they are consistent with other observations.

Britain is blindly closing down its coal- and oil-fired generating capacity. A tragedy was narrowly avoided on Jan. 16, 2013, when another windless, bitter cold snap left Britain without enough electricity in its grid to warm a million homes. Had those homes lost their power, there is little doubt some people would have frozen to death. Fortunately, that didn't happen because several recently closed coal- and oil-fired generation facilities were able to restart. Next year, these plants will be disassembled. It is estimated that 10 percent of the U.K.'s current generation capacity was shut down by February 2013 with nothing but unreliable promises of wind power to make up the difference.

Wind power is obviously unreliable and the wind generator's projected life expectancy is much shorter than promised. A detailed analysis by the Renewable Energy Foundation in December 2012 showed "a



Over 3,000 wind turbines have been erected in the United Kingdom. Citizens believe they are a blight on the landscape, kill birds, are noisy, and have unreliable energy which became life threatening in January 2013 when they could not produce enough power to heat one million homes. SOURCE: Onshore wind farm Little Cheyne Court (U.K.). Used by permission, RWE Innogy.

the four highest peak demands of 2010, wind output reached just 4.72 percent, 5.51 percent, 2.59 percent and 2.51 percent of capacity, according to the analysis.

Worse, the study showed the promised 30 percent efficiency of wind is, in practice, much less: "Wind generation was below 20 percent of capacity more than half the time

significant decline in the average load factor of onshore wind farms adjusted for wind availability as they get older." In the U.K., load capacity (the ability to produce electricity) declined from a peak of about 24 percent at age one, to 15 percent at age 10, and 11 percent at age 15." That's a loss of more than 50 percent in 15 years and twice



Turbine failure in high winds, North Ayrshire, Scotland. The rate of failure of wind turbines and towers far exceeds expectations, requiring more frequent replacement, shorter life expectancies, and higher costs. SOURCE: Stuart McMahon, used with permission.

the expected loss. “The drop is thought to be mostly due to mechanical breakdowns” due to the tremendous stresses put on the tower and generator. This suggests that wind farms be decommissioned after 12-15 years rather than the current 20 years, increasing operating costs significantly.

All this comes at a terrible price. Electricity bills for U.K. consumers have risen more than 70 percent since 2005, much of it due to the cost of natural gas and coal, as well as green energy. Some 5.5 million citizens were classed as living in fuel poverty in 2011, and, like Germany, it is getting worse. Bloomberg New Energy Finance projects U.K. electricity prices to increase by another 54 percent by 2020, the largest share from expensive green energy. By 2013, the U.K. was facing the toughest winter since the Little Ice Age in the 1850s. When the numbers are in, it is likely millions more young Brits will be added to the swollen list already experiencing fuel poverty.

Bitter fights continue between pro- and anti-wind proponents. The Cameron administration has announced cuts to wind subsidies several times in 2013, but progressive environmentalists and ministers in Parliament literally howled in protest. What the U.K. will do is uncertain. Analysts are warning that unless the government stops the disastrous green subsidies and develops a dependable source of energy very soon, the cost in human tragedy in the U.K. will be massive.

There is a way out for Britain. The British

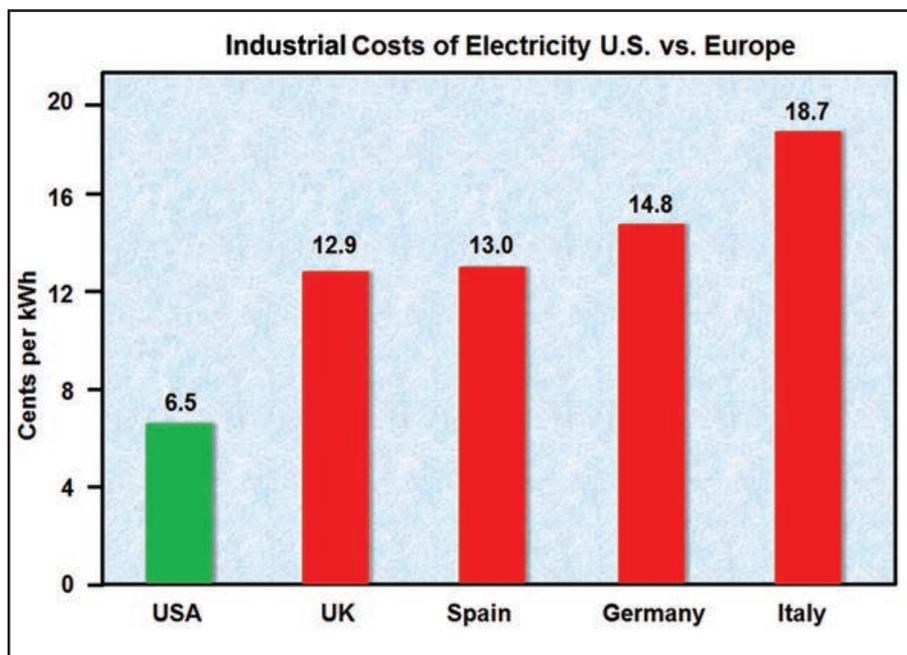
Geological Survey claimed in April 2013 that the U.K. is potentially sitting on enough shale gas reserves to heat all its homes for at least 100 years. This may be grossly underestimated. Chancellor of the Exchequer George Osborne attempted to set direction by announcing on Dec. 5, 2012, that Britain would definitely develop its vast supply of shale gas, much like the United States has done since 2007. Again, this met with howls of protests by environmentalists and progressives in Parliament.

Impact on Business

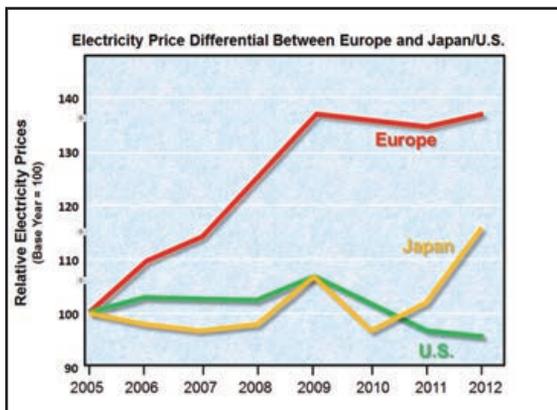
Both German and British business and industry are bitterly complaining that the green policies of their respective governments are making them grossly uncompetitive with America. The U.S. had tapped into a literal bonanza of natural gas and oil that was technologically unavailable until the early 2000s. Advancements in fracking technology has opened up vast supplies of cheap natural gas and oil, allowing the U.S. to claim one of the largest known reserves on earth. (See “U.S. Energy Boom—Maybe,” Spring 2013 *RANGE* at www.rangemagazine.com.)

Natural gas prices are four to five times higher in Europe than the United States. The May 2013 issues of *EnergyFactsWeekly* blasted the progressive governments of the European Union (E.U.), saying: “The energy facts of life are catching up to western Europe. The hostile regulatory environment toward carbon, especially coal, is leading to business closures, higher prices, stagnation, unemployment, fuel poverty and an increase in the death rate. In their fascination with computer models based on untested hypotheses, European Union policymakers have *put their countries so far behind the economic curve that it will take decades to catch up to more competitive nations.*” (Italics added)

Writing in the May 13, 2013, *Financial Post*, Peiser warned: “Europe’s manufacturers, who are rapidly losing ground to international competition, have announced plans



Cost of electricity for European industry is twice to three times as expensive as the United States, putting them at a distinct competitive disadvantage. SOURCE: EnergyFacts.org.



Europe's disastrous energy policy is rippling across its economy as industry, business and jobs flee the European Union, all while more and more citizens plunge into energy poverty. SOURCE: European Commission, Organization for Economic Cooperation and Development.

to expand in the United States. Instead of investing in the energy-expensive E.U., they are pouring hundreds of millions of dollars into the U.S. where energy prices have fallen to a third of those in the E.U., largely due to the shale gas revolution."

That's great for the United States, but horrible for jobs in Europe. It has caused a very frustrated Andrew McKillop, former energy analyst for the Euro Commission, to complain bitterly: "The European Union is wracked by sovereign debt, budget deficits, monetary weakness, slow economic growth,

trade deficits...and mass unemployment—but it has the supposedly proud role of world leader in Green Energy Transition."

In spite of the success of greens and progressives in Europe to force the E.U. to go to green energy, the entire European renewable house of cards may be tumbling down. On April 16, 2013, the price of carbon in the E.U. trading scheme plummeted 45 percent to a record low of 2.63 euros (\$3.40). This followed a steady decline from 34 euros (\$44) in April 2006. The European Commission finally decided that throwing good money after bad was not a good idea. It had already artificially raised the price of E.U. carbon permits once in January by restricting supply (called backloading), and decided a second try would be no more successful. The vote to not prop up the price was close and bitter (334 to 315). Analysts agree that this will probably be the death knell for the E.U. carbon-trading scheme.

Once again, wails were heard after the E.U. Parliament's decision. Julia Michalak of Climate Action Network Europe spit out the statement, "It's outrageous that Parliament

seems to value polluting industry more than Europe's green future." Oblivious to the reality there won't be a green future if Europe's economy crashes, Michalak just confirmed that these progressives and greens believe nature is far more important than people and they are willing to destroy lives to perpetuate their utter failures.

Business (including industry) and labor are both demanding the E.U. shift "energy policy away from climate-change mitigation towards cost-competitiveness and security of supply." Most E.U. nations are seriously considering developing whatever oil shale God blessed them with. Germany remains the biggest holdout, pressured by anti-frackers.

Every study on fracking pollution has shown it to be safe—if done correctly. In the U.S., the EPA tried for 20 years to prove fracking harmed the environment and has twice been forced to admit to Congress that it doesn't cause any pollution—if done properly. The highly publicized and inflammatory media reports that methane in water wells was caused by fracking were shown to be totally false. They were *not* caused by fracking but by methane pockets close to the surface. Ironically, the EPA had to announce in April 2013 that pollution control efforts by private industry had cut methane emissions by an average of 41.6 million metric tons

It's the Sun After All

Will science ruin the cap-and-trade scam? By Michael S. Coffman, Ph.D.

Stanford University biologist Paul Ehrlich repeatedly made headlines warning: "By 1975, some experts feel that food shortages will have escalated the present level of world hunger and starvation into famines of unbelievable proportions.... The death rate will increase until at least 100-200 million people per year will be starving to death during the next 10 years."

The current hysteria over global warming was preceded in the 1970s by hysteria over global cooling. On June 24, 1974, *TIME* magazine's cover announced, "Another Ice Age." On April 28, 1975, *Newsweek* wrote, "The longer the planners delay, the more difficult will they find it to cope with climatic change once the results become grim reality." Why? Because we were rapidly approaching the "tipping point of no return" into the next ice age.

These terrifying proclamations are laughable today. While they scared a lot of people at the time, at least the United States did not squander nearly a hundred billion dollars trying to avoid those false claims. Tragically, this is not the case for the global-warming hysteria that has gripped the world since the late 1980s. The exact same words and hyperbole are being used to terrify Americans into believing the world will come to an end—unless we spend trillions of dollars fighting this phantom global-warming crisis.

IPCC's Change of Heart

The earth has not warmed for the past 15 years. Even the U.N.'s Intergovernmental Panel on Climate Change (IPCC) admits it. The ocean did *not* warm during the 20th century either. Hurricanes and tornado activity are at or near record lows. Contrary

to proclamations to the contrary, Hurricane Sandy and the deadly April 2013 tornadoes in Oklahoma were not caused by global warming. Sea-surface temperatures are not rising and the rate of rising sea levels has remained unchanged for more than 100 years. Yet, carbon dioxide levels continue their steady rise.

This has the IPCC in a dither and, for the very first time, it is finally admitting in its draft soon-to-be-released Fifth Amendment Report (AR5) that maybe, just maybe, the sun may be the key to climate change: "The forcing from changes in total solar irradiance alone does not seem to account for these observations, implying the existence of an amplifying mechanism such as the hypothesized GCR-cloud link." GCR is Galactic Cosmic Radiation. However, the Summary for Policy Makers for AR5 (the only one report-

annually from 1990 to 2010, a 20 percent reduction from previous estimates.

Lessons Learned

Will the E.U.'s efforts to reverse course be too little too late? Benny Peiser says: "The question remains whether European leaders can actually roll back the green belief system and overcome this self-inflicted eco-disaster. In particular, the race for shale exploration will decide whether policy makers can win the battle against massive green rejectionism."

Even though Europe's foray into alternative green energy has been a major failure by any account, progressives and environmentalists will never accept it. Their belief is based on ideology, emotion and religion, not on reality. French psychiatrist Gustave Le Bon wrote an entire book on early pro-

gressives as they were taking over Europe in the late 1800s. In "The Crowd," Le Bon found that "they most often have only a very distant relation with the observed fact." He describes their "incapacity to reason." They "exaggerate, affirm, resort to repetitions, and never attempt to prove anything by reasoning." That does not stop them from demonizing anyone who disagrees with them, often with violence. They become "automatons," and once they become fixated on an idea, will pursue it dogmatically with a "sense of invincible power," even though their actions are "in utter contradiction with [their] character and habits." Le Bon refers to this phenomenon as "hallucinations." The energy fiasco over the past 10 years shows that nothing much has changed in 100 years.

Hundreds of billions of euros and pounds have been spent, scenic vistas polluted, birds killed, electricity costs skyrocketed, economies floundered, and lives threatened—all in the name of reducing carbon emissions to prevent nonexistent man-caused global warming and phantom claims that we are running out of fossil fuel. Worse, the goal of reducing carbon emissions failed miserably and actually spiked upwards in Europe despite all the pain suffered by its people.

The only nation whose carbon emissions actually met the Kyoto reduction goals was the United States which, unlike Europe, never ratified the Kyoto Protocol in 1997. No legislation was passed in the United States, yet our industries reduced carbon emissions to near 1990 levels despite the

ed by the media) still denies any solar connection, probably for political reasons. Once the IPCC admits that the sun plays a major role, 22 years of scare mongering goes out the window and the IPCC is out of business.

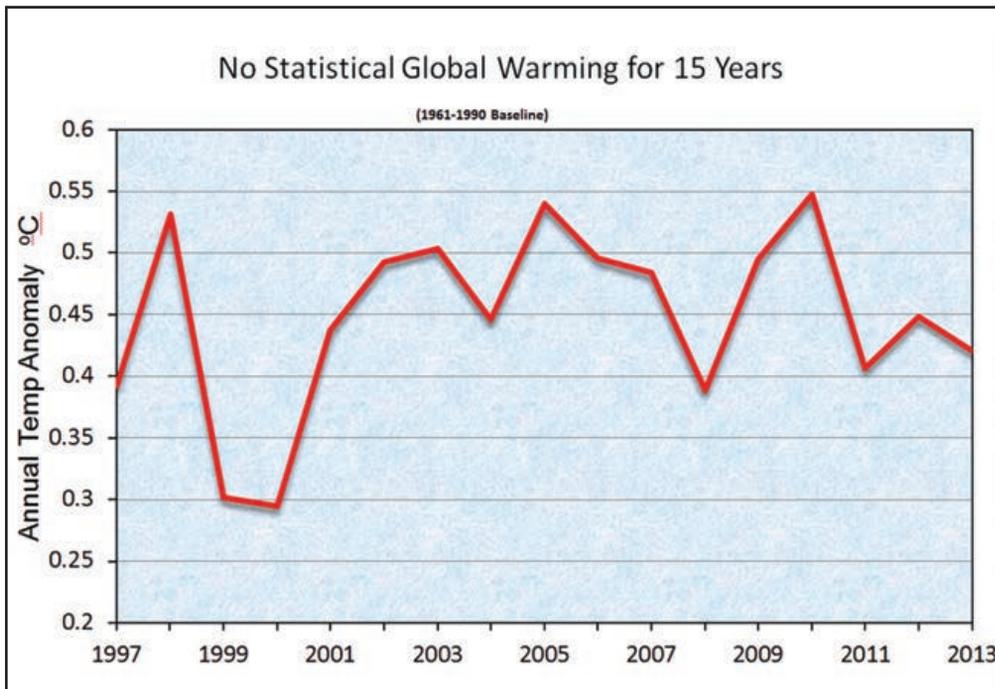
Although a mountain of research supports the solar theory, new research seems to clinch it. The *Journal of Climate* recently reported that tiny variations in solar activity over 11-year solar cycles have greatly ampli-

fied effects upon climate via changes in the Arctic cycles (oscillations): "The IPCC claims the tiny variations in solar activity during solar cycles cannot affect climate, but this paper and many others demonstrate solar activity has greatly amplified effects upon climate via ocean oscillations, atmospheric oscillation..., stratospheric ozone, and sunshine hours/clouds." (See "Global Cooling.")

NASA is even admitting: "Within the rel-

atively narrow band of EUV [extreme ultraviolet] wavelengths, the sun's output varies not by a minuscule 0.1 percent, but by whopping factors of 10 or more. This can strongly affect the chemistry and thermal structure of the upper atmosphere." NASA then goes on to warn: "The sun could be on the threshold of a mini-Maunder event [Read: Little Ice Age] right now. [Today's] Solar Cycle 24 is the weakest in more than 50 years. Moreover, there is [controversial] evidence...that by the time Solar Cycle 25 arrives, magnetic fields on the sun will be so weak that few if any sunspots will be formed." We are halfway through Cycle 24.

If the solar theory is correct, we are likely heading into global cooling, or a 30- to 70-year "Little Ice Age" that was experienced in the 18th and 19th centuries. Earth's temperature dipped a couple of degrees cooler and was accompanied by crop failures, starvation and disease. However, it is still premature to say this is a high probability any more than a few droughts, hot summers, or bad tornadoes prove that man-caused global warming is occurring. If a Little Ice Age does happen, however, scientists warn that the consequences to mankind will be far more cataclysmic than ever predicted for global warming. ■



There is universal agreement that there has been no statistical global warming for more than 15 years. http://www.metoffice.gov.uk/hadobs/hadcrut4/data/current/time_series/HadCRUT.4.2.0.0.annual_ns_avg.txt
SOURCE: HadCRUT 4 data.

constant attempts by Washington to control industry's activity through excessive regulations. Even after releasing a mass of new climate regulations in 2012 by the EPA (see "EPA's Tidal Wave," RANGE, Summer 2013 at www.rangemagazine.com), President Obama's June 25, 2013, climate-change announcement to use the EPA as a sledgehammer to shut down all coal generation and threaten all fossil-fuel production of electricity would strangle the U.S. economy and cause electricity costs to skyrocket, just as he promised in his 2008 campaign, and just as is happening in Europe today.

Also, the U.S. Chamber of Commerce, several industry groups, and the states of Texas and Virginia have filed petitions with the Supreme Court challenging the science and legal basis of these regulations. If even

one of these petitions is taken up by the Court, it would perhaps put a much-needed fence around EPA's ever-expanding power.

Our current administration and progressives in both political parties seem immune from the harsh lessons learned in Europe, and that should cause all Americans great concern. The only way to bring reality back to government is at the ballot box. Tragically, most Americans are oblivious and the harsh reality is that these kinds of changes are often wrought by a very few dedicated people. That may just be you and me. ■

Dr. Coffman is president of Environmental Perspectives Incorporated (epi-us.com) and CEO of Sovereignty International (sovereigntyinternational.org) in Bangor, Maine. He has had more than 40 years of university teaching, research and consulting experience in forestry and envi-

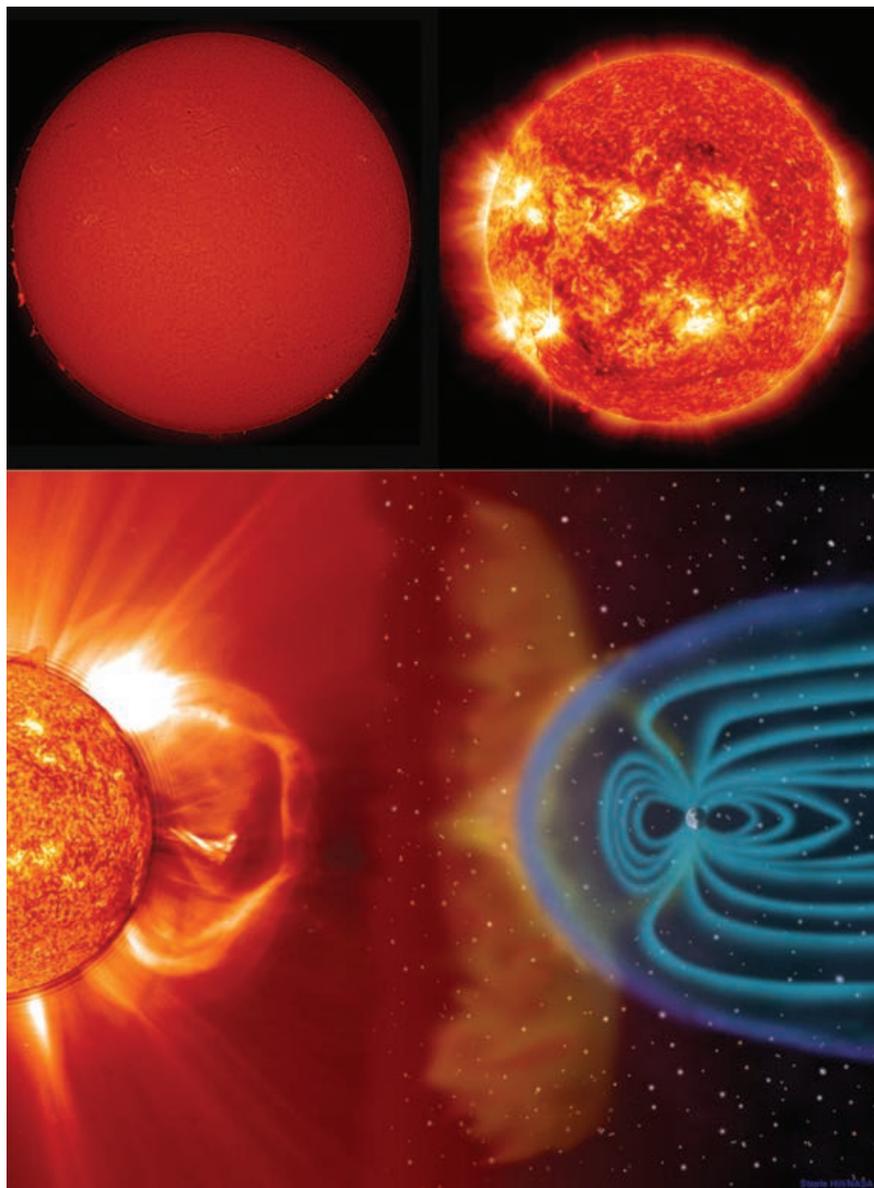
ronmental sciences and now geopolitics. He has led a multimillion-dollar research effort on climate change and was one of four who stopped the ratification of the Convention on Biological Diversity one hour before the Senate cloture vote. The Biodiversity Treaty is one of the major treaties promoted by Agenda 21. He produced the acclaimed DVD, "Global Warming or Global Governance" (warmingdvd.com), disproving man-caused global warming, another major theme of Agenda 21. Dr. Coffman's newest book, "Plundered: How Progressive Ideology Is Destroying America" (AmericaPlundered.com), details how the American people are being indoctrinated and bullied into a destructive belief system called progressivism. His recent book, "Rescuing a Broken America" (rescuingamericabook.com), is receiving wide acclaim. He can be reached at 207-945-9878 or epinc@roadrunner.com.

Global Cooling

TOP: Halfway through a typical 11-year solar cycle the sun goes from quiet (left) to very active with numerous solar flares (right). The flares emit massive amounts of X-rays, ultraviolet light, ions, etc., along with some plasma. The white flares appear as sunspots to the naked eye. BOTTOM: At the height of activity there are also frequent coronal mass ejections whereby massive amounts of solar plasma are ejected into space (bottom left). If the plasma passes over the earth (bottom right), earth's magnetic field (blue) bends but dampens most of the plasma's energy (and also creates aurora borealis). If strong enough it can knock out satellites and even electrical power grids and electronics on earth. All of these solar emissions are termed "solar winds." (SOURCE: NASA)

THE SOLAR THEORY: The U.N. IPCC claims that since the total solar irradiance only increases by 0.1 percent when active, there is insufficient energy to affect earth's climate and temperature. However, two decades of overwhelming research (ignored by the IPCC) has shown that cosmic radiation helps increase lower cloud formation. These clouds act to reflect incoming solar radiation back into space thereby causing global cooling of the earth.

When the sun is active, however, solar winds dampen incoming cosmic radiation originally created by exploding suns (super novae) throughout the galaxy. It has been proven that when there is less cosmic radiation, fewer clouds are formed, which allows more solar radiation to reach the earth surface and the earth warms. NASA now admits that these different "kinds" of solar emissions during the sun's active period can have an enormous effect on the earth's temperature regulation process (see article). The shorter the solar cycle, the greater the solar activity. This has been the case from 1975 to 2000. The longer the cycle, the less the activity. The current cycle (Cycle 24) will be 12-13 years. NASA is very concerned the sun is going into hibernation (little to no activity) which will likely produce global cooling (or worse, another Little Ice Age). There is a growing consensus that this is one of the primary drivers for climate change. Another factor is ocean oscillations, which also seem to have an important impact. Planetary orbits may also have an effect. CO2 is way down the list.



COURTESY NASA