An Integrity in Research Initiative into New and Emerging Energy

Thomas Valone, PhD, PE

Integrity Research Institute
Earth’s Most Recent 400,000 Year Climate History

credit: Dr. Jim Hansen, NASA Goddard Inst. for Space Studies

CO₂ and the “Ornery Climate Beast”

How might today’s human-caused increases in atmospheric concentrations of carbon dioxide and other greenhouse gases change the planet? The past provides clues. Geological records show that in the past 400,000 years, atmospheric concentrations of carbon dioxide, average Earth temperature, and sea levels have risen and fallen roughly in tandem, in 100,000-year cycles paced by slight oscillations in Earth’s orbit. These oscillations affect the distribution of sunlight, thereby affecting the total amount reaching Earth; yet scientists believe this has been enough to set in motion chains of events that raise and lower temperatures, launch and end ice ages, and trigger vast changes in sea level. What’s coming next? Carbon dioxide—the number one greenhouse gas—has much more power to affect Earth’s temperature than the orbital changes do. And in just the past 150 years, human-kind has boosted carbon dioxide concentrations by 22 percent. NASA planetary scientist Jim Hansen says that if we continue to increase greenhouse-gas emissions, temperatures will rise between 2 and 3 °C this century, making Earth as warm as it was three million years ago, when seas were between 15 and 35 meters higher than they are today. His predictions bear weight partly because he can verify his methods: using geological records, he has calculated past temperatures, and his results closely match the measured temperatures shown here. —David Talbot

MIT’s Technology Review, July/August, 2006
Global CO₂ level is now 400 ppm

This forces a 4°C (7°F) temperature spike and sea level upsurge

Baseline:
0 m Sea Level = 290 ppm CO₂ = 15°C World Temp

Projected Sea Level Rise is 80 meters

KEY to graph: 10 ppm = 0.5°C = 10 meters
2006 Meeting with V. P. Al Gore
– We discussed climate effects on trees
Then in 2009, two different climate groups:

SAME PREDICTION

The Nation

New Analysis Brings Dire Forecast Of 6.3-Degree Temperature Increase

By Juliet Eilperin
Washington Post Staff Writer

Climate researchers now predict the planet will warm by 6.3 degrees Fahrenheit by the end of the century even if the world’s leaders fulfill their most ambitious climate pledges, a much faster and broader scale of change than forecast just two years ago, according to a report released Thursday by the United Nations Environment Program.

The new overview of global warming research, aimed at marshaling political support for a new international climate pact by the end of the year, highlights the extent to which recent scientific assessments have outstripped the predictions issued by the Nobel Prize-winning U.N. Intergovernmental Panel on Climate Change in 2007.

Robert Corell, who chairs the Climate Action Initiative and reviewed the UNEP report’s scientific findings, said the significant global temperature rise is likely to occur even if industrialized and developing countries enact policies to cut emissions — and even if they don’t.

Warming Trend

Researchers say global temperatures as likely to rise more than six degrees by the end of the century even if every country enacts all climate legislation it has promised to enact to date.

Temperature increases, in degrees Fahrenheit

<table>
<thead>
<tr>
<th>Degrees the average global temperature is likely to increase if all countries continue as they are now</th>
<th>Source: Sustainability Institute</th>
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<tbody>
<tr>
<td>8.13</td>
<td>The Washington Post</td>
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<tr>
<td>6.29</td>
<td></td>
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<tr>
<td>4.6</td>
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<td>2.7</td>
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Farmers are overshadowed by a smoke-belching cement factory outside Hanoi. Even with sharp emissions curbs, temperatures may rise disastrously.
1999 Conference on Future Energy

The First International Conference On Future Energy
Integrity Research Institute
WORKSHOPS
Holiday Inn Bethesda
Bethesda, Maryland
Saturday, May 1, 1999

Science & Government Report
First Ever Zero-Point Energy Panel of Experts
Future Energy Surge of 2009

- SPESIF Future Energy Source Workshop, Huntsville AL, Feb. 24-26, 2009
- Future Energy Forum, Bilboa, Spain, June 9-11, 2009
- Conference on Future Energy, Washington DC, Oct. 9-11, 2009 (COFE3 was third in a series, tenth anniversary)

IntegrityResearchInstitute.org
Future Energy Goals

Why “future energy” rather than just more renewables?

- Expand new energy discoveries including wireless energy
- Develop the newly discovered modes of propulsion
- Create optimum health with electromedicine

No Carbon Emissions

Integrity Research Institute (IRI)
Integrity Research Institute

IntegrityResearchInstitute.org

- ENERGY RESEARCH AND EDUCATION WITH SCIENTIFIC INTEGRITY
- Conferences, Books, Reports, Products & Future Energy eNews

- ADVOCACY FOR THE COMMON GOOD without favoritism
- nonprofit 501(c)3 organization that accepts tax-deductible donations
Programs Fulfilling IRI’s Non-Profit Mission

Integrity Research Institute

Energy Propulsion Bioenergetics

www.IntegrityResearchInstitute.org
Energy Medicine Projects

• Electric Clothes, OsteoPad, PREMIER
• HF EMF can be “pulsed” – called PEMFs
• Low transmembrane potential TMP = disease =
  • = low Na-K pump & ATP impairment
• External high voltage PEMFs increase TMP
• Boosting TMP while creating electron transfer to fight free radicals helps the immune system and gives the body MORE ENERGY
• Electric gradients vs. chemical gradients

“Electrons are antioxidants and high voltage EMFs strengthens immune response.” – Dr. T. Valone
Photonic Rejuvenation Energizing Machine & Immunizing Electrification Radiator (PREMIER)

Dr. Richard Gerow with Model 200

PREMIER Junior Model 100

Dr. Jacqueline Panting using Model 2500
Electric Antioxidant Clothing

Patent pending – Dr. Jacqueline Panting, N.D.

Supplying *antioxidant microcurrent electrons* to skin-tight clothing boosts energy and performance by quenching free radicals directly.
Bone Knitting OsteoPad™

- 1 out of 2 people will develop osteoporosis*
- OsteoPad™ provides a patented EM signal proven to stimulate calcium transport across bone cell membrane, just like weight bearing exercise creates piezoelectric signals
- Heals bone fractures in \( \frac{1}{2} \) of the time
- Strengthens bones of elderly while they sleep, reversing osteopenia and osteoporosis
- In development by IRI in cooperation with Dr. Manning who patented an early version

*Time, October 25, 2004, p. 101
ENERGY PROGRAM

June 25, 2002            CNN Moneyline
2/3 of US Electricity is Wasted

Ref: DOE & U.S. Energy Association, 2002

Consumed: 39 Quads

Wasted: 27 Quads
8 trillion kWh

Delivered: 12 Quads
3.7 trillion kWh

Total of Electric Utility & Nonutility Producers
Projected World Energy Demand

World Energy Demand—Long-Term Energy Sources

Reinventing Fire provides a credible path to a U.S. economy free of oil and coal by 2050.

Energy Use in the U.S. Economy, 2010–2050

Unlock $5 trillion Support a 158% bigger Use 0 energy from oil.

Rocky Mountain Institute, RMI.org, founded by Dr. Amory Lovins
Innowattech – 500 kW per km

- Piezoelectric panels for roadways and train tracks
- Generates electricity from passing vehicles
- Game changing invention ready for installation
- Should be developed in this country as well
- Advocated by IRI in *Future Energy Annual 2012*

Piezo panels ready for insert
Tritium Betavoltaic Battery

- ECN magazine 7/2012
- Nanowatt power - AFRL
- 20 – 40 year lifespan
- IRI advocacy for 10 yrs.
- Paul Brown, COFE 1999, Patent # 4,835,433
- Ray Kurzweil “Ten Coolest Technologies” - PC magazine, 7/12/06

CityLabs.net Model P100

BetaBatt Inc. - SBIR grant from NSF

U of Wisconsin solved degradation with liquid electrodes
Polymer Generates Energy from a Wet Surface

MIT reports a polymer with a piezoelectric layer generates electricity only from a moisture gradient without any pressure!

30 second video shows movement as polymer dries and then flattens out to get wet again

10 January 2013 by Jacob Aron - New Scientist
Magnetic Field Gradients

The net Force created on the ball bearing = the magnetic field gradient multiplied by the induced magnetic moment, as with the Stern-Gerlach Experiment.

In the Stern-Gerlach experiment, performed in 1921, a beam of silver atoms having zero total orbital angular momentum passes through an inhomogeneous magnetic field and strikes a photographic plate, as shown in Fig. 21-1. Any deflection of the beam when the magnetic field is turned on is measured on the photographic plate.

Their experimental setup: The magnetic field $B$ is more intense near the pointed surface at the top than near the flat surface below, creating a slope in a graph of $B$ vs. $z$, which is the gradient $dB/dz$.

\[ F_z = \mu_0 c \cos \theta \frac{dB}{dz} \]  
(21.1)

where $\theta$ is the angle between $\mu$ and $B$, and $dB/dz$ is the gradient of the inhomogeneous field.

In the Hartman Patent #4,215,330, a 10 degree incline drop-off is used to create a gradient in the magnetic field, causing the steel ball bearing to deflect. The patent details the design and application of this concept in various engineering contexts.
Spiral Permanent Magnet Motor

Proposed Permanent Magnet Spiral Motor for Magnetic Gradient Energy Utilization

Thomas F. Valone

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Abstract: The Spiral Magnetic Motor, which can accelerate a magnetized rotor through 90% of its cycle with only permanent magnets, was an energy initiative for the 20th century patents by Kome Takedo in the WWI's. However, the Japanese company used old ferrite magnets which are relatively weak and an electrically-powered coil to jump start every cycle, which defeat the primary benefits of the permanent magnet motor design. The principle of applying an inhomogeneous, anisotropic magnetic field gradient force \( F = -\nabla B \) with permanent magnets is well known in physics, e.g., Stern-Gerlach experiment, which explains the interaction of a magnetic moment with the aligned electron spins of magnetic domains. In this case, it is applied to divide in polar coordinates, where the force \( F \) depends on the magnetic field gradient. The design using a Weigand-GMM-PZT switch and no external electricity makes the Spiral Wankel Motor a powerful and efficient solution for energy utilization.
Physicists Confirm Power of Nothing; Measuring Force of Quantum ‘Foam’

Fluctuations in the vacuum are the universal pulse of existence.

By MALCOLM W. BROWNE

For a half century, physicists have known that there is no such thing as absolute nothingness, and that the vacuum of empty space, devoid of even a single atom of matter, seethes with subtle activity. Now, with the help of a pair of metal plates and a fine wire, a scientist has directly measured the force exerted by fleeting fluctuations in the vacuum that pace the universal pulse of existence.

The sensitive experiment performed at the University of Washington in Seattle by Dr. Steve K. Lamoreaux, an atomic physicist who is now at Los Alamos National Laboratory, was described in a recent issue of the journal Physical Review Letters. Dr. Lamoreaux’s results almost perfectly matched theoretical predictions based on quantum electrodynamics, a theory that touches on many of the riddles of existence and on the origin and fate of the universe.

The theory has been wonderfully accurate in predicting the results of subatomic particle experiments, and it has also been the basis of speculations verging on science fiction. One of the wilder ones is the possibility that the universal vacuum — the ubiquitous empty space of the universe — might actually be a false vacuum.

If that were so, something might cause the present-day universal vacuum to collapse to a different vacuum of a lower energy. The effect, propagating at the speed of light, would be the annihilation of all matter in the universe. There would be no warning for humankind; the earth and its inhabitants would simply cease to exist at

Continued on Page C6
Quantum Energy Extraction

Haisch-Moddel patent 7,379,286

It is reasonable to expect that a 0.1 microns Casimir cavity would result in a release of 1 to 10 eV for each injection of a He, Ne, Ar, Kr or Xe atom into such a cavity.

Test of zero-point energy emission from gases flowing through Casimir cavities

Space, Propulsion & Energy Sciences International
1 March 2012

Olga Dmitriyeva & Garret Moddel*
Department of Electrical, Computer, and Energy Engineering
University of Colorado
*Presenter (also with Jovion Corporation)

This discovery has fueled interest in another noble gas device: The Papp Engine, explosive but completely enclosed. See Valone Papp Engine video from COFE6 on futureenergy.org
Rectifying Ambient Thermal and Nonthermal Electric Noise

- Prof. Dagenais amplifies ambient thermal energy harvested with nanoantennas at UMD
- Zero-bias diodes that need no minimum energy to conduct
- Backward tunnel diodes

- Example of a Diode Array
  24-hour electrical energy source
Tesla’s Design for Wireless Energy

- 1905 Earth is resonant LRC circuit
- Magnifying transmitter 200 ft tall
- Wardenclyffe sphere 68 foot diameter
- Resonates with earth-ionosphere natural 8 Hz frequency for 95% efficiency of transmission
- Longitudinal and transverse EM waves
- see *Harnessing the Wheelwork of Nature*

IRI celebrated the Wardenclyffe Tower Centennial in 2003 with a [Tesla Conference and Expo](#) as well as book release
Electrostatic Induction (capacitive coupling)

High-field Gradient or differential capacitance

Also known as the “Tesla Effect” can be described as electrical displacement or the passage of electrical energy through space other than the application of voltage potential

Ionized plasma “conductor”!!

Giant earth-ionosphere capacitor

Slide from Nick Simos, PhD, PE

COFE6, July 12, 2013
Engineer Mike Gamble discloses that Boeing has been using inertial propulsion (scissoring gyroscopes) on its satellites “for years” at COFE5 sponsored by IRI.
Flame jet generator

Credit: Paul LaViolette, PhD

B-2 Bomber

Charge distribution

ELECTRO GRAVITICS SYSTEMS
Volume I
Thomas Valone, PhD

ELECTRO GRAVITICS II
Validating Reports on a New Propulsion Methodology
Thomas Valone, PhD
Electrogravitics and Electrokinetics are Propellantless Propulsion Sources

By Thomas Valone, PhD, PE

Published with two conferences

STAIF, Albuquerque, NM
February 16, 2006

and

AIAA, Joint Propulsion Conference,
Hartford CT
July 23, 2008
Electrogravitics HoverCraft Demo
Norton Air Force Base 1988

1950’s rivets
Oxygen tanks
Passengers

Complete story in
Disclosure by Dr. Steven Greer & Electrogravitics II by Tom Valone
Investigated by Dr. Hal Puthoff, former CIA contractor
Seen by Brad Sorenson and a Congressman

© 2001, Mark McCandlish
Black Projects Have Inertial Shielding

As seen on History Channel, 2008

Dr. Bruce Cornet, geologist led group of eye witnesses

1995 Photo credit: W. Marc Whitford

- Pine Bush near Stewart AFB
- Delta-shaped aircraft
- Two mobile white headlights
- Steady red, green lights and blinking yellow lights on tips of craft
- No visible contrail
- Abrupt change of direction
- Ability to hover motionless
- Inverse Doppler effect
- Audible but low engine noise
Homopolar Generators are “a subject worthy of further research”

Based on *Sunburst: Return of the Ancients* book by Norman Paulsen:

Giant Rock, Calif. saucer, photo & deputy sheriff who took the photo

“Magnets around the edge of a rotating disk”

“generator would be self-perpetuating”
Books that Contain Most of this Slideshow

“We have to move beyond fossil fuels anyhow. Why not now?” – Jim Hansen, NASA climatologist
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