A Brief History of Energy

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What It Is

- Energy is the same as matter.
- $E = mc^2$ is not just an equation. It’s an identity.

Take an iron bar. Heat it up. It weighs more.
What Is Energy?

An iron ball positioned above a surface represents energy with respect to its position resting on the surface. *But the energy is not in the ball.*
Why do we care?
Energy is involved in getting things done that we want done.

When building a large pyramid it takes energy to move the blocks to the top of the pyramid.
More About Energy

Going from here to Cleburne should not require any energy exchange, because Cleburne is at the same gravitational potential as here.

However, moving across the ground and through the atmosphere involves pushing against other kinds of resistance.
Energy can be defined by equivalent amounts of useful work. Useful work, and energy, are related to force and distance: \( dw = f \cdot ds \), where the dot is for the vector dot product, which involves the cosine of the angle between the \( f \) and \( ds \). Hint: If \( f \) and \( ds \) are perpendicular, no useful work is done.

The electrical equivalent is \( dw = v \cdot dq \) (voltage difference times charge moved). We also see \( P = I \cdot V \), where \( P \) is power, \( I \) is current and \( V \) is voltage. The dot product relates to the phase angle difference of the current and the voltage.

James Prescott Joule analyzed the conversion of mechanical work to equivalent amounts of heat energy.
Useful Work

We have long used wind and falling water to extract mechanical work from nature to accomplish our tasks.

About 200 years ago we realized we could also extract mechanical energy from heat, and the Industrial Age was born.

Mechanical energy (useful work) can be extracted from heat by allowing heat to move from hotter regions to cooler regions. Heat will not spontaneously flow from cooler regions to hotter regions.

The temperature of a system is defined by

\[ T = \log n, \]

where \( n \) is the number of occupied quantum energy levels of the system.
Laws of the Universe

Rule 1: The total of energy in the Universe is constant (most likely zero).
Rule 2: All other rules need to take Rule 1 into consideration.
Rule 3: Closed systems are like the universe, except they can have non-zero energy.
Sources of Usable Energy

The sun
Earth’s residual kinetic energy
Nuclear reactions (matter to usable energy)
Vacuum free energy, but don’t count on it.

Fossil energy sources ultimately derive from the sun.
Hydro-electric energy derives from the sun.
Wind energy derives from the sun.
Geothermal energy derives from nuclear reactions.
Tidal energy derives from Earth kinetic energy.
There aren’t many other sources.
Some Sad Truths

Hydrogen is not a source of energy. It’s an energy transport mechanism, and not a very good one.

Energy from hydrogen fusion is a pipe dream.

Vacuum free energy is available at the equivalent of one gallon of gasoline in the volume of the earth.
The State of Hydrogen Fusion

The state of hydrogen fusion 40 years ago
Benefits of Free Energy

- Unlimited fresh water
- Unlimited natural resources
Unlimited Fresh Water

- Current fresh water sources are due to solar energy.
- Ocean-going ships derive fresh water from sea water using evaporators. All it takes is energy.
- Free energy can be applied to obtain fresh water for domestic use, farming and industry.
- Free energy can be used to move supplies of fresh water.
- Using free energy it would be feasible to extract fresh water from the air in desert climates.
Magnesium is extracted from sea water at a cost of 18 KWh/kg.
Reverse Osmosis Requires Energy
Stanley Meyer’s Fuel Cell

The water fuel cell is a purported perpetual motion machine invented by American Stanley Allen Meyer (August 24, 1940 – March 21, 1998). He claimed that an automobile retrofitted with the device could use water as fuel instead of gasoline. The fuel cell purportedly split water into its component elements, hydrogen and oxygen. The hydrogen was then burned to generate energy, a process that reconstituted the water molecules. According to Meyer, the device required less energy to perform electrolysis than the minimum energy requirement predicted or measured by conventional science. If the device worked as specified, it would violate both the first and second laws of thermodynamics, allowing operation as a perpetual motion machine. Meyer's claims about his "Water Fuel Cell" and the car that it powered were found to be fraudulent by an Ohio court in 1996.

Stanley Meyer’s Device

Stanley Meyer’s Death

Stanley Meyer died suddenly on March 21, 1998 after dining at a restaurant. An autopsy report by the Franklin County, Ohio coroner concluded that Meyer had died of a cerebral aneurysm, but conspiracy theorists insist that he was poisoned to suppress the technology, and that oil companies and the United States government were involved in his death. Meyer’s patents are still available online, although there has as yet been no independent verification of his claims.

Perpetual Motion
Sources of Free Energy

- Solar (1 kw/m²)
- Wind
- Tides
- Geothermal
- Hydroelectric
- Temperature differences and fluctuations
- Pressure variations
- Cars on a freeway
- Normal motion (self-winding watches)
Historical Free Energy Frauds

- Joe Newman’s free energy machine
- Pons and Fleischmann’s cold fusion
- The Patterson energy cell
- Garabed Giragossian’s flywheel energy machine
- Robert Fludd’s water wheel
- Robert Walker’s Hydrogen Futures Act
- Dennis Lee and the Fisher engine
- BlackLight Power
- The Podkletnov gravity shield
BlackLight After 10 Years

Thermally Reversible Hydrino Catalyst Systems as a New Power Source


BlackLight Power, Inc., 493 Old Trenton Road, Cranbury, NJ 08512

ABSTRACT
Newman and Lee

AMAZING SIMILARITIES BETWEEN JOE NEWMAN AND DENNIS LEE:

Joe Newman has been raising money on his promise of having free energy for 30 years. 10 years ago, Dennis Lee started the same kind of operation. Although I see little amazing about the evidence for free energy, I must admit the operations of free energy claimants, Dennis Lee and Joe Newman have an eerie similarity. Their styles and history have had uncanny parallels:

- Both raise smaller amounts of money selling information about their claims, but get larger sums 5 to 6 figure selling dealerships to investors. They publish frequent meandering publications of their theory, efforts and evidence of the powerful conspiracy trying to stop them. Both employ fringe right wing rhetoric to focus on some powerful international multi-generational conspiracy to bury free energy and brainwash mainstream engineers like me. Both employ patriot style rhetoric and seem to draw considerable support from patriot groups. The conspiracy theory is brandished as a reasoning trump card to any pesky questions from critics.
- Both have held large revival style shows to demonstrate their technology to simple common people. The pitch seems to work best among lesser educated conspiracy believers. Like other "free energy messiahs" before them, they have done better with farmers or people in economically depressed areas.
- Both have claimed to receive messages directly from God and seem to promise machines in 2 months . . . every 2 months.
- Both consider the entire engineering and scientific educational system to be gravely mislead or part of a conspiracy.
Eugene Podkletnov - gravity shielding

In 1996, Russian émigré scientist Eugene Podkletnov was about to publish a peer-reviewed article in the respected British Journal of Physics-D proving, he claimed, that gravity could be negated.

Then a London newspaper publicized his conclusions, and the skeptics had a field day. Everyone knew you couldn't mess with the law of gravity—Einstein himself had said so.

Podkletnov withdrew the article.  
His university exonerated him.  
He retreated from the public eye.

But the controversy hasn't gone away, as his findings began to be investigated in laboratories around the world. Including one owned by NASA.

Now, as Charles Platt discovers, Eugene Podkletnov is back and unrepentant. [source Wired]
The Real World

It produces limitless amounts of free energy.

Sounds great! Give me a demonstration.

Sure. Let me just plug it in...

Next!