E-Cat Technology welcomes you to a new age of energy production.

The idea of LENR “Low Energy Nuclear Reactions aka Cold Fusion” has been around for several decades, and has finally taken its final leap into reality with our release of the E-Cat Technology (Energy Catalyzer).

The world´s first working 1 MW thermal heat generating plant (ECAT) was demonstrated to the public and many scientists throughout 2011, thanks to the genius inventor Dr. Andrea Rossi, from Italy.

The energy source is nickel and hydrogen where no combustion process takes place but instead the hydrogen is merged with nickel and forms small amounts of copper. The energy density is a factor of 100,000 or more compared to the combustion processes of today’s fuels. The energy density is so high that the E-Cat modules only need to be re-loaded two times a year

This is a game changer; it creates energy with very low energy inputs. E-cat technology provides a truly clean and green source of energy without radioactive byproducts and no carbon emissions.

It has already earned the reputation of being both economically attractive, saving energy and money for its customers, and the ultimate "green" machine.

Currently the E-Cat Industrial unit produces 1 MW of steam and hot water, and is available for purchase. We invite you to thoroughly read through the specifications and cost comparisons on the 1 MW unit.

In the near future, towards the end of 2012, the domestic 10 Kw will be available for purchase. Simply install this unit into your new home, or retrofit into your existing home, which is guaranteed to radically reduce your power consumption and energy bills, saving much $$ for our customers, as well as reducing carbon emissions. We invite you to pre-order the domestic unit without obligation or pre-payment-just watch this space over the next few months to witness the…

new age of energy production…

Advanced Technology

The E-Cat technology *consumes no radioactive materials, produces no nuclear waste, emits no pollution, and incorporates numerous safety features and consumes only small quantities of cheap fuel -- nickel powder and hydrogen gas.*

The E-cat operates at a high COP (Coefficient Of Performance), which means combined with the low cost of the fuel, means that the consumer will pay a comparatively lower cost to what they currently experience with commercial heat / hot water/ air conditioning and cooling.

- **The COP is guaranteed at 6:1**
- This means that the E-Cat inputs 167 KW in to create 1000KW of thermal energy (1000 divided by 167= 6)
- There is nothing else like this on the planet today
- This is highly competitive in the market place
- There are strong possibilities that this COP will increase beyond 6.0.

Many other technologies have lower COPs, the average for combustion technology as well as resistive heating being 1:1.

Also this is just the start. We have witnessed the unit running in self-sustaining mode, which means it can reach a much higher COP, which means it is even more cheaper to run! However, at this stage the COP is officially guaranteed at 6:1 and no data is available for the potential for self sustain mode (no energy input) and higher COP

The E-Cat technology works by taking a small amount of micron sized nickel powder, applying a catalyst, putting it all in a pressurized hydrogen atmosphere, and applying heat to the setup. Truly novel nuclear reactions start to take place between the nickel and hydrogen atoms, and the result is a huge release of energy. The nickel and hydrogen fuel is cheap, and only tiny amounts are utilized. To give you an idea of just how powerful this technology can be, consider the fact that a reactor core with a volume of only fifty cubic centimeters can produce a maximum safe output of ten kilowatts of heat. Utilizing the same few grams of nickel and only tiny amounts of hydrogen, the same reactor core could produce ten kilowatts continually for six months, or longer.

In addition to being powerful, the technology is completely safe. It uses no radioactive materials, produces no nuclear waste, emits no radioactivity into the environment, and releases no pollution. Unlike conventional nuclear reactors, E-Cat reactor cores cannot melt down. If the temperature of the core grows too high, the nickel powder melts and all of the reaction sites are destroyed, and the core becomes "dead" until new fuel is added.

Definition of LENR: They are weak interactions and neutron-capture processes that occur in nanometer-to-micron-scale regions on surfaces in condensed matter at room temperature. Although nuclear, LENRs are not based on fission or any kind of fusion, both of which primarily involve the strong interaction. LENRs produce highly energetic nuclear reactions and

elemental transmutations but do so without strong prompt radiation or long-lived radioactive waste.

Exothermic nuclear reactions

The elements in nature consist of molecules formed from atoms. The atoms are characterized by a positively charged nucleus and by peripheral negative electrons, which determine their species. The nucleus in turn is formed of neutrons and protons – collectively known as nucleons – held together by extremely intense forces within a short range of action. The mass of the nucleus is less than the sum of the masses of the nucleons (protons and neutrons) that form it. The mass difference (Δm), which is related to the binding energy according to the mass-energy equivalence principle ΔE=Δmc2, is called the mass defect.

What about nuclear fuels? The nuclei that have the lowest binding energy per nucleon provide nuclear energy by fusion if they have low atomic mass and by fission if their atomic mass is high. Nuclear binding energy vs. mass

Let us now look at the nuclear reactions that are accompanied by the production of energy: **The fusion reaction**: two light nuclei fuse together and form a heavier nucleus. Here the energy is released because the mass of the resulting nucleus is lower than the mass of the two reacting nuclei.
The fission reaction: a very heavy nucleus splits into two lighter nuclei. In this case, too, the total mass of the components is less than the mass of the original nucleus. For the same amount of reactants, the energy released during a nuclear reaction is millions of times the energy released during chemical reactions (combustion).

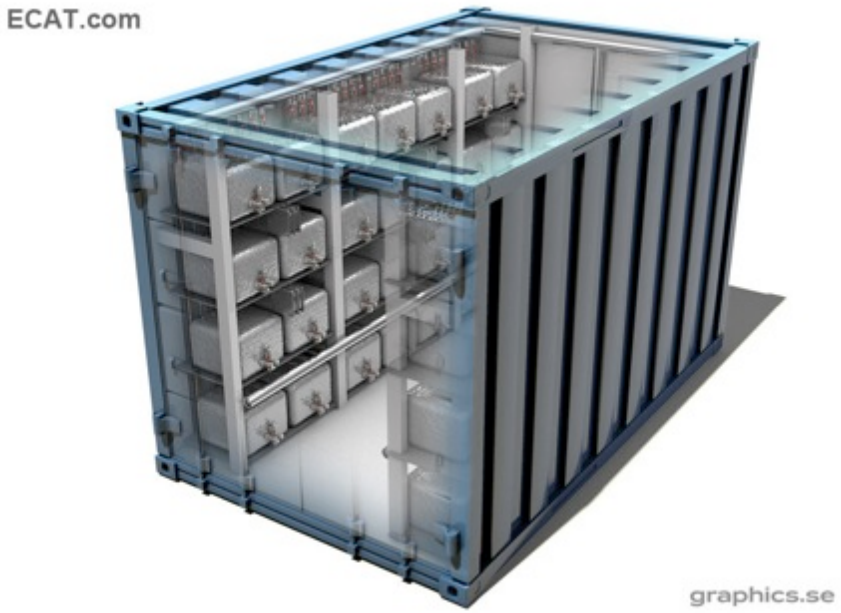
The Anatomy of an E-Cat

The central container is about 50 cm^3 in size and it contains 0.11-gram hydrogen and 50 grams nickel. The enthalpy from the chemical formation of nickel and hydrogen to nickel hydride is 4850 joule/mol. If it had been a chemical process, a maximum of 0.15 watt-hour of energy could have been produced from nickel and 0.11-gram hydrogen, the whole hydrogen content of the container. On the other hand, 0.11 gram hydrogen and 6 grams of nickel (assuming that we use one proton for each nickel atom) are about sufficient to produce 24 MWh through nuclear processes assuming that 8 MeV per reaction can be liberated as free energy. For comparison, 3 liters of oil or 0.6 kg of hydrogen would give 25 kWh through chemical burning. Any chemical process for producing 25 kWh from any fuel in a 50-cm^3 container can be ruled out. The only alternative explanation is that there is some kind of a nuclear process that gives rise to the measured energy production.

Industrial 1MW E-Cat

The E-Cat 1 MW reactor produces energy through the LENR of nickel and hydrogen where no combustion process takes place but instead the hydrogen is merged with nickel and forms copper. The energy density is a factor of 100,000 or more compared to the combustion processes of today's fuels.

The E-Cat 1 MW reactor, due to its container construction, is easily transported. This makes delivery and installation straightforward. It is delivered in a standard container which can be stacked if your energy solution requires multiple ECAT 1MW plants connected into parallel.



MW Plant is made up of smaller modules where the actual reactor is the size of 20cmx20cmx1cm. These small reactors are coupled in modules of 3 pieces each, and then these modules in turn are built into a 20-foot container with a series of 106 pieces. Power density in the small reactor is as high as 100 kW / L

The e-cat 1 MW can also be retrofitted into your existing energy production design, as it will reduce power and energy consumption.

- MUCH CHEAPER PER MEGAWATT HOUR
- CLEAN GREEN
- NO POLLUTION
- LOW MAINTENANCE - RELIABLE
- TRANSPORTABLE
- CARBON CREDITS

Applications of this 1MW E-Cat Heat Power

Current – up to 103 Degrees Celsius

E-Cat technology can be applied wherever compact safe inexpensive heat power is required.

- Industrial and commercial heating
- Heating in industrial processes, such as manufacturing and drying
- Air conditioning (which would require standard industrial equipment to be attached)
- Space heating for large industrial areas
- Heat source for air conditioning, e.g. evaporative type
- Heating for large shopping centers/shops.
- All buildings/ supermarkets/ can be retrofitting
- Construction of new buildings would want this (major cost saver)
- Heating for hospitals, schools, universities
- Train stations- airports - i.e. large enclosed areas
- Sports stadiums
- Heating of swimming pools
- Heat /cooling source for greenhouse agriculture/ hydroponics food production

There is also the incredible potential to do **DESALINATION** and water purification. The 1 MW produces saturated steam-, which easily turns to water!!!

Installation
It is shipped from its manufacturing plant in the USA to your location, on a container truck. On average the delivery time is 4 months from payment of a deposit. It takes 1-2 days to install and connect by our qualified team from E-Cat Australia. Operational manuals are provided. The safety procedures are very similar to that involved with water boilers.

E-Cat Australia provides a one-day training course for personal that will be operating the equipment. No special qualifications are necessary to run this unit. It is as simple as knowing the start and stop switch and some other basic information

Basic Competitive Advantages: Why The Customer Will Buy This NOW.

The future is biased toward the E-Cat, as this technology is more cost effective when compared with conventional fuels

Currently the E-Cat is used as a hot water generator below 100 degrees C or saturated steam at 101-102-103 degrees C. This means initially we are in the marketplace in competition with industrial boilers or steam. These usually work on electricity, steam, coal, and #2 heating oil. Obviously, none of these are renewable, and emit greenhouse gases.

Specification of E-Cat 1Mw Unit

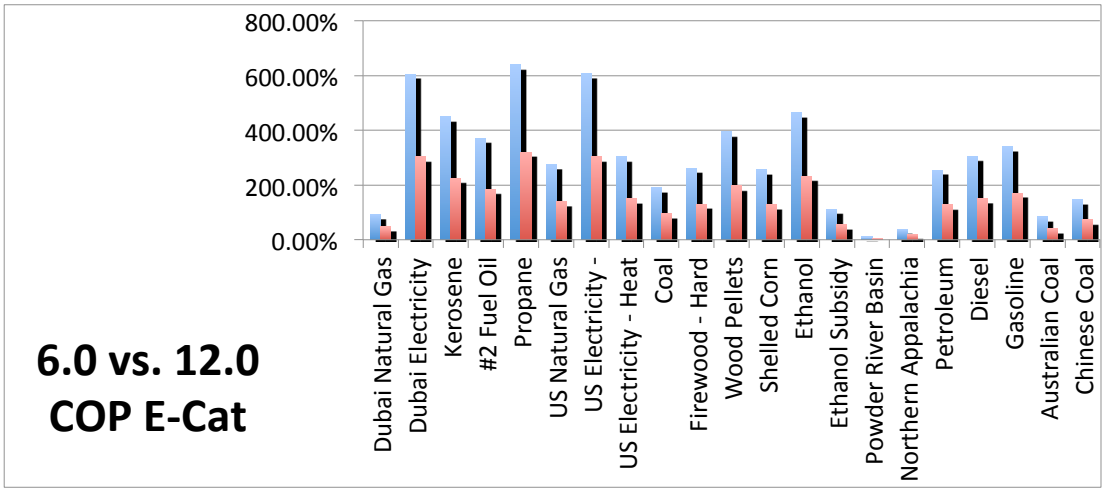
Thermal Output Power	1 MW
Electrical Input Power Peak	200 kW
Electrical input Power Average	167 kW
COP	6
Power Ranges	20 kW-1 MW
Modules	106
Power per Module	10kW
Water Pump brand	
Water Pump Pressure	4 Bar
Water Pump Capacity	1500 kg/hr.
Water Pump Ranges	30-1500 kg/hr.
Water Input Temperature	4-85 C
Water Output Temperature	85-120 C
Control Box Brand	Natl. Instr.
Controlling Software	Leonardo
Operation and Maintenance Cost	$36.34/MWhr
Fuel Cost	$18.33/MWhr
Recharge Cost	$10/module
Recharge Frequency	2/year
Warranty	2 years
Estimated Lifespan	20 years
Price	1.5 M US$
Total Cost (20 years operation)	$3,371,610.00
Dimension	2.4x2.6x6m

OPERATIONAL & MAINTENANCE COST E-CAT TECHNOLOGY

Description - material	Unit Rate - USD		Required for per MWh Heat output		Cost per day (24Hrs) of MW Heat output	Cost per year (8766Hrs) of MW Heat output	Remarks	
Electricity input COP 6:1	$0.11	Per KW	3.33		$440.00	$160,710.00	This is based on cheap Dubai Tariff, with a COP of 6.	
Water Calculations Sydney Water Price	$0.03	Per Liter	5.2	liter	$0.16	$1,367.00	Cost per Year @ Standard Boiler leakage Rates NOT an e-cat expense	
Operation & Maintenance per Published Specs	$0.50	Per MWh	$0.50	USD	$12.00	$4,383.00	Per Published Specs.	
Recharge Cost	$10.00	Per module	0.24	USD	$5.80	$2,120.00	Per Published Specs.	
Hydrogen	5	Liters				$1.00	Very small amount- not even in the equation	
Actual Variable Cost						$168,580.50		
Capital Cost	1.5	Million			$410.68	$150,000.00	Amortized at 1MW per hour for 8766 hours per year for 10 years.	
Variable & Amortized Capital Cost for 10 year operation	1.5	Million			$872.23	$318,580.50	Actual per day cost including amortization	
Variable & Amortized Capital Cost over 20 years Operation	1.5	Million			$436.11	$159,290.25	Actual Per day cost including Amortization	

Description	Price	Unit Rate	Required for Per MWh Heat Output	Cost Per Day	Cost Per Year	Remarks
Electricity Input COP 6.0	$0.11	166.6666667	$18.33	$440.00	$160,710.00	
Water Calculations - Price Per Liter @ 5.2 Ltrs Consumed	$0.030	5.2	$0.16	$3.74	$1,367.50	Not an e-cat expense
Operation & Maintenance per Published Specs	$0.50	per MWh	$0.50	$12.00	$4,383.00	
Recharge Cost - 106 Units	$10.00	Per Module	$0.24	$5.80	$2,120.00	
Capital Cost - Amortized Over 10 Yr. Period	$1,500,000.00	USD	$17.11	$410.68	$150,000.00	
Total Cost			$36.34	$872.23	$318,580.50	
Total Variable Cost					$168,580.50	
Capital Cost per KWh						
Net KW per hour: Capital Cost Only	$0.017					
Net KW per hour w/o Capital Cost Included	$0.019					
Net Total KW cost per hour:	$0.036					
Ratio of Electricity input cost vs. Net Cost:	3.026738963					
Loopback Calculations:						
Net KW per hour: Capital Cost Only	$0.017					
Net KW per hour w/o Capital Cost Included	$0.011					
Net Total KW cost per hour:	$0.028					
Ratio of Electricity input cost vs. Net Cost:	3.979513836					
				% of E-Cat	% of E-Cat	Cost Per Day
Cost Comparisons:	**Cost**	**BTU**	**Per KW**	**COP 6.0**	**COP 12.0**	**1MW Plant**
Dubai Natural Gas	$5.00	1000000	$0.0171	46.96%	93.91%	$206.61
Dubai Electricity	$0.11		$0.1100	302.67%	605.35%	$1,331.77
Kerosene	$23.97	1000000	$0.0818	225.11%	450.21%	$990.47
#2 Fuel Oil	$19.73	10000	$0.0673	185.29	370.57	$815.26

		00		%	%	
Propane	$34.04	1000000	$0.1162	319.67%	639.35%	$1,406.57
US Natural Gas	$14.71	1000000	$0.0502	138.14%	276.29%	$607.83
US Electricity - Resistance	$32.24	1000000	$0.1100	302.77%	605.54%	$1,332.19
US Electricity - Heat Pump @ COP of 2.0	$16.12	1000000	$0.0550	151.39%	302.77%	$666.10
Coal	$10.18	1000000	$0.0347	95.60%	191.20%	$420.65
Firewood - Hard Wood	$13.89	1000000	$0.0474	130.44%	260.89%	$573.95
Wood Pellets	$20.96	1000000	$0.0715	196.84%	393.68%	$866.09
Shelled Corn	$13.66	1000000	$0.0466	128.28%	256.57%	$564.45
Ethanol	$24.74	1000000	$0.0844	232.34%	464.67%	$1,022.28
Ethanol Subsidy	$5.92	1000000	$0.0202	55.60%	111.19%	$244.62
Powder River Basin Coal	$0.56	1000000	$0.0019	5.26%	10.52%	$23.14
Northern Appalachia Coal	$2.08	1000000	$0.0071	19.53%	39.07%	$85.95
Petroleum	$13.56	1000000	$0.0463	127.34%	254.69%	$560.31
Diesel	$16.21	1000000	$0.0553	152.23%	304.46%	$669.81
Gasoline	$18.16	1000000	$0.0620	170.54%	341.09%	$750.39
Australian Coal	$4.45	1000000	$0.0152	41.79%	83.58%	$183.88
Chinese Coal	$7.82	1000000	$0.0267	73.44%	146.88%	$323.13



The Chart above describes the economics of the operation of the E-cat versus various fuels by percentage. For example, Chinese coal is 73.44 percent of the operating cost of the 6.0 COP E-Cat, and Petroleum is 254.69% of the operating cost of the 12.0 COP E-Cat.

E-Cat Cost Comparison

	E-Cat	Dubai Electricity	Kerosene	#2 Fuel Oil	Propane
Price Per Million BTUs	**$10.65**	$32.24	$23.97	$19.73	$34.04
Price Per Megawatt Hr.	**$36.35**	$110.04	$81.81	$67.34	$116.18
Cost Per Day	**$872.36**	$2,640.84	$1,963.43	$1,616.12	$2,788.28
Cost Per Month	**$26,170.88**	$79,225.29	$58,902.92	$48,483.71	$83,648.53
Cost Per Year	**$318,630.51**	$964,567.86	$717,143.04	$590,289.20	$1,018,420.91
Cost For 10 Yrs Op.	**$3,186,305.13**	$9,645,678.62	$7,171,430.41	$5,902,892.03	$10,184,209.06
Cost For 20 Yrs Op.	**$6,372,610.25**	$19,291,357.24	$14,342,860.83	$11,805,784.07	$20,368,418.13

Fuel increases calc. at 5 %, E-Cat decrease in price at 2 % comparisons over 10 years

Fuel Cost Increase Projections @ 5% Per Year:	E-Cat Decrease 2% in price	Dubai Electricity	Kerosene	#2 Fuel Oil
1 Year	**$10.44**	$33.85	$25.17	$20.72
2 Years	**$10.23**	$35.54	$26.43	$21.75
3 Years	**$10.02**	$37.32	$27.75	$22.84
4 Years	**$9.82**	$39.19	$29.14	$23.98
5 Years	**$9.63**	$41.15	$30.59	$25.18
6 Years	**$9.43**	$43.20	$32.12	$26.44
7 Years	**$9.25**	$45.36	$33.73	$27.76
8 Years	**$9.06**	$47.63	$35.41	$29.15
9 Years	**$8.88**	$50.01	$37.19	$30.61
10 Years	**$8.70**	$52.52	$39.04	$32.14

	Propane	US Natural Gas	US Electricity - Resistance	US Electricity - Heat Pump @ COP 2.0	Firewood - Hard Wood
1 Year	$35.74	$15.45	$33.85	$16.93	$14.58
2 Years	$37.53	$16.22	$35.54	$17.77	$15.31
3 Years	$39.41	$17.03	$37.32	$18.66	$16.08
4 Years	$41.38	$17.88	$39.19	$19.59	$16.88
5 Years	$43.44	$18.77	$41.15	$20.57	$17.73
6 Years	$45.62	$19.71	$43.20	$21.60	$18.61
7 Years	$47.90	$20.70	$45.36	$22.68	$19.54
8 Years	$50.29	$21.73	$47.63	$23.82	$20.52
9 Years	$52.81	$22.82	$50.01	$25.01	$21.55
10 Years	$55.45	$23.96	$52.52	$26.26	$22.63

	Wood Pellets	Ethanol	Petroleum	Diesel
1 Year	$22.01	$25.98	$14.24	$17.02
2 Years	$23.11	$27.28	$14.95	$17.87
3 Years	$24.26	$28.64	$15.70	$18.77
4 Years	$25.48	$30.07	$16.48	$19.70
5 Years	$26.75	$31.58	$17.31	$20.69
6 Years	$28.09	$33.15	$18.17	$21.72
7 Years	$29.49	$34.81	$19.08	$22.81
8 Years	$30.97	$36.55	$20.03	$23.95
9 Years	$32.52	$38.38	$21.04	$25.15
10 Years	$34.14	$40.30	$22.09	$26.40

	Gasoline	Chinese Coal	Dubai Natural Gas	Coal
1 Year	$19.07	$8.21	$5.25	$10.69
2 Years	$20.02	$8.62	$5.51	$11.22
3 Years	$21.02	$9.05	$5.79	$11.78
4 Years	$22.07	$9.51	$6.08	$12.37
5 Years	$23.18	$9.98	$6.38	$12.99
6 Years	$24.34	$10.48	$6.70	$13.64
7 Years	$25.55	$11.00	$7.04	$14.32
8 Years	$26.83	$11.55	$7.39	$15.04
9 Years	$28.17	$12.13	$7.76	$15.79
10 Years	$29.58	$12.74	$8.14	$16.58

	Ethanol Subsidy	Powder River Basin Coal	Northern Appalachia Coal	Australian Coal
1 Year	$6.22	$0.59	$2.18	$4.67
2 Years	$6.53	$0.62	$2.29	$4.91
3 Years	$6.85	$0.65	$2.41	$5.15
4 Years	$7.20	$0.68	$2.53	$5.41
5 Years	$7.56	$0.71	$2.65	$5.68
6 Years	$7.93	$0.75	$2.79	$5.96
7 Years	$8.33	$0.79	$2.93	$6.26
8 Years	$8.75	$0.83	$3.07	$6.57
9 Years	$9.18	$0.87	$3.23	$6.90
10 Years	$9.64	$0.91	$3.39	$7.25

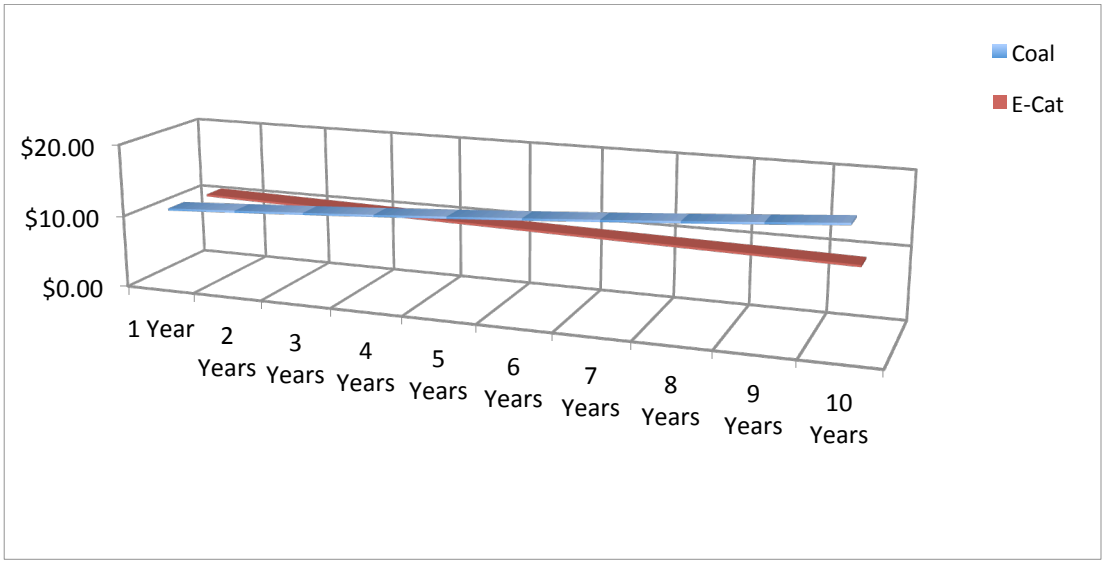


Chart above show coal as our strongest competitor

As E-Cat technology decreases over time and coal prices will increase, the projected crossover point is 3-4 years. We did not calculate the carbon CO2 emission taxes and associated health costs and environmental impact of fossil non –renewable coal. Nor did we calculate the carbon foot print credits and government subsidies for the E-Cat green technology benefits for the customer (also if customer replaces coal, they get rebates / subsidies etc.)

E-Cat technical and financial data:

- E-Cat Australia has the exclusive license for Australia, New Zealand, Indonesia, PNG, and all Pacific Islands
- Sell price 1.5m US plus GST
- Payment of 1/3 US$ at time of order: US $500,000
- Delivery 3-4 months after order and deposit
- Payment of 2/3 US$ after performance test: US $1,000,000
- GST is $150,000
- Delivery from USA factory to customers location is customers cost
- Shipping costs for container 1 MW approx. $US 3000-4000 from Miami USA
- Exact quote given or arrange your own shipping and transport
- Installation by E-Cat Australia team at Customer expense, approx. 2 days / $1500 per day, includes operating manuals and staff training

HOME DOMESTIC 10 kW UNITS RELEASED LATE 2012

10KW Home E-Cat Heating Unit

Estimated Price $US 2500.00

Estimated 6 months re-fill cartridge cost $US 55

Estimated Lifetime 20 years

Easy to retrofit into existing water heaters and house warming systems to seriously reduce customers' electricity bill.

The energy density is so high that the E-Cat modules only need to be loaded two times a year. On these occasions, you will simply mail your E-Cat cartridge back to our office to be recycled, and we will send you a re-fill, plus of course you can always have a spare cartridge close at hand.

One important factor is the proposed carbon taxes, which are not taken into consideration in our cost comparisons, and the possible rebates or subsidies for clean energy technologies.

In the final analysis, over time the E-Cat gives a substantial cost savings over conventional fuels.

It is estimated a 50-80 % saving on your electricity and gas bill.

Benefits

The E-cat operates at a high COP, which means combined with the low cost of the fuel, means that the consumer will pay a comparatively lower cost to what they currently experience with commercial heat generation. The energy density is 2 Million times higher compared with oil.

These charts amortize how much the customer is paying in running costs in comparison to other systems. The E-cat is cost competitive with several other technologies, most of which are not ecologically sound.

Bottom Line

What the above charts prove is that in the final analysis, over time the E-Cat gives a substantial cost savings over conventional fuels. In the analysis, a cost reduction of 2% per annum is assumed in the E-Cat, while at the same time, a 5% cost increase is occurring in the price of conventional fuels. Another important consideration is the price of nickel, which over the past five years has remained flat. This means that the cost of the fuel for the E-Cat does not substantially increase in cost, while at the same time, as the technology improves, the price of the E-Cat decreases.

Comparisons

In the beginning, we see that on the first line, the price per million BTUs after the first year's operation of the E-Cat is $10.44. This 2% reduction represents the improvement in the technology. Substantial savings are seen across the board

When one runs this forward in time, at the end of 10 years the E-Cat is now down to $8.70 per million BTUs

The further into the future you go, the cheaper the E-Cat becomes to operate compared to conventional fuels. At some point, the technology curve will flatten for the E-Cat, and the price will stabilize. However, the cost for the conventional fuels will not, and will continue on their upward curve.

The future is biased toward the E-Cat, as this technology is more cost effective when compared with conventional fuels. One important factor is the proposed carbon taxes, which are not taken into consideration in this table, and the possible rebates or subsidies for clean energy technologies, which is even more in favor of the E-Cat.

Environmental benefits

The need to find responsible and responsive practical solutions to the real problems of keeping our economy, our livelihoods and our planet alive and healthy is a necessity, not a dream.

It needs to be tackled now.

Today, our world turns on energy that is either produced from natural resources like coal, oil and natural gas, or on large-scale nuclear reactors. All these leave pollutants behind them that harm our planet and our future. Most other forms of energy production under development will not meet all our needs

The challenge is enormous, the solution not easy.

What we all want and need is a proven way of sourcing enough energy for today, and for the future needs of our children and communities everywhere, that is safe, clean, affordable, sustainable, and continuous – no small order. We want green energy whose only footprint is nature herself.

After decades of research and experimentation, we are on the doorstep of being able to provide a workable solution to this immense challenge.

Our future, and that of all those we care about, depends on the imaginative and workable solutions to closing the gap between today's polluting resources, and the non-harmful solutions the E-Cat technology from us can provide.

However skeptical you might be that such a clean and simple energy source can be provided without any of the drawbacks of other energy sources, we invite you to consider the potential that what we call E-CAT energy can provide.

The E-cat can deliver energy in ways that meet our needs and stringent criteria – clean, reliable, efficient, affordable, sustainable energy, with no bad residual effects, like pollutants.

When you think that products like coal lose almost 80% of their potential energy in the very act of burning, you begin to realize how much more efficient E-CAT technology can be.

We are talking about multiples of energy with very low energy inputs.

Whatever your current role or occupation, your career or your life-plans, there will increasingly be tougher demands on the resources you can use, and can afford to use, to maintain and enjoy your lifestyle, improve it, and ensure others can too. We are working hard to make a contribution to that need for a global commitment to continuous renewable non-polluting energy, and we urge you here to examine our proposals and products to deliver affordable, practical and workable solutions

By investing in the right Energy Catalyzer for your needs, you are helping everybody while positively helping yourselves. Initial savings over any competing energy resources are identifiable. Longer term cost savings look even more attractive.

Our mission is to help everybody enjoy a fulfilling life, with appropriate levels of energy, without leaving a polluted legacy for our children and other communities to manage their way out of.

Our method is scientific, rigorous and robust, and we operate in a climate of transparency and openness. We invite you to share our knowledge, and to participate in the vision we are bringing to life today.

The future benefits

Currently, the E-Cat technology has not been linked into electrical generating equipment. However, Andrea Rossi, the inventor of the E-Cat technology, is busy developing electric power generation (currently 1MW of heating only available). Latest reports indicate that Rossi will be introducing electrical power generation in approx. 1-2 years.

Also, is the near future, the temperature reached by the e-cat will reach between 200-400 C

Applications of this 1MW E-Cat Heat Power

Future – 200-400 Degrees Celsius

• Anything that requires industrial heat sourcing, such as process heating

• Food processing

• Any kind of industrial cooking that is needed (food processing)

• Food drying at elevated temperatures

• Chemical processing that requires heat

• Petro refineries e.g. fractional distillation

• Substitute heat source for producing steam to drive turbines in industrial power plants, (which removes the need to burn coal, diesel or gas to heat the water- and no CO2 emissions and zero pollutants)

• Tar sands process steam for oil extractions

• Any steam driven sea / river going vessel i.e. steam engine

• Industrial laundry

• Military ships that currently use nuclear power

• Submarines- as a safe fuel

The great benefit of this technology is that the equipment can be built to any size depending on the requirement – either to service large geographic areas, or on a much smaller scale to produce heat and electricity in space, on ships, in mines – the possibilities are endless

	Pollution Free	Very Safe	In-exhaus-tible	Unlimited	Low Fuel Cost	Low Reactor Cost	Compact	Locate Anywhere	Working 24/7 (4)	Ready Now
Fossil Fuel						✓	✓	✓	✓	✓
Hydro-electric	✓	✓	✓		✓	✓	✓			✓
Wind	✓	✓	✓		✓					✓
Solar	✓	✓	✓		✓					✓
Uranium Fission	(1)		✓	✓	✓		✓	(3)	✓	✓
Plasma Fusion	(2)		✓	✓	✓		✓	(3)	✓	
E-Cat	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

The E-Cat Technology- what does it mean to society?
A look into the future with E-Cat Australia's Chief Technical Advisor William Donovan.

THIS IS A NEW STANDARD.

Many decades ago, we were promised that nuclear energy would be so cheap that it could not be metered. What was not anticipated was how incredibly dirty this source of energy could be. Perhaps if a holistic approach was used, we could have turned around and not embraced the leviathan. But that was not done, and we have many thousands of metric tons of radioactive waste to contend with due to our collective lack of foresight.

The bite of the leviathan has hardened many to a high degree of skepticism toward any new form of energy. If anything comes along that seems positive, it has to be too good to be true. It has caused us to reject clean sources of energy for this reason.

The Rossi E-cat gives us an opportunity to change this attitude. It provides a truly cheap source of energy without radioactive byproducts. This time we really have a "cheap" energy, one that will become a new standard for comparison.

One Rossi E-Cat "cell" can potentially produce all the heat and power that a typical home would need for a cost of $80.00 per year. This would include recharging an electric vehicle plugged into the socket, as 80% of the population can utilize an electric car for their transportation needs. This means that the aged no longer have to choose between heat and food. That will become a thing of the past, relegated to the dark times before the fusion era.

Further Implications
Currently, transport from Earth to Orbit costs approximately 5000 dollars per kilo. We use rockets primarily because exotic propulsion systems are energy hogs, taking as much as 180 watts per kilo. Normally, that's a lot of energy, and nuclear fission is far too dangerous and dirty to use to generate this kind of power. When we burn a fuel, only a few parts per million are converted to energy. Nuclear fission converts perhaps at most 0.1 percent of its mass to energy. The rest becomes radioactive garbage. Fusion converts between 1 to 10 percent of its mass to energy, and the Rossi E-Cat has no radioactive waste byproducts. It is 100 times more efficient than fission. It is the only compact power source that can take us to the stars, and it can do it with one ten thousandth the cost of chemical fuels, at about $0.50 per kilo.

When this power source is first adopted for propulsion, first we will see airlines converted over to fusion, with the turbines replaced with electric motors to turn the turbofans. After this, the turbofans will be replaced with more advanced exotic propulsion systems, which will reduce the noise considerably. Ticket costs will plummet. With exotic propulsion, sub-orbital flights will become common, reaching any point on the planet within two hours.

This is only the start. Let's see what else happens.
With the price from Earth to orbit now less than what we currently pay for an airline ticket, there will be resurgence in space tourism. Arthur C. Clarke's world of 2001 will become a reality, with weekends in a space hotel becoming a reality. (Perhaps we should let Paris Hilton know about this.) After this, the mining industry begins to move off world. After all, there are more resources in the solar system than on Earth anyway. Billions of tons of nickel iron asteroids in “the belt” are waiting for us. There will be no shortage of nickel for the Rossi reactors, and with Jupiter, there is a planet load of hydrogen. No problems there.

Once industry moves off world, the waste products of industry go with them. The Earth becomes cleaner. Strip mining becomes a thing of the past. Mankind becomes a citizen of the galaxy, not merely belonging to a country on one planet. Carbon dioxide levels over decades normalize as there not only is less combustion going on, but there are also less people on the planet exhaling. Carbon dioxide may hold the heat in, but human activity generates it. With 2.4 x 1012 watts getting turned into heat, the human furnace represents approximately 8 x 1012 BTUs. That must be factored in.

All of this is well and good, but can be a bit overwhelming. Let's look at it as a timetable, and see what happens.

Immediate - 1-10 Years: The Conventional Adoption Period
This is a time where, for those who are familiar with triage, society adopts fusion for immediate needs. We will see businesses that need cheap energy to stay afloat as the first to implement the technology. As an example, in a conversation with an oilman from Midland, Texas, it was revealed that the local utility was charging them $10,000 per well to operate the electric motors for the pumps. He has 100 wells, and it was costing him a million dollars per month to bring the oil to the surface. He also mentioned that this cost was passed on to

the consumer, resulting in higher oil prices going to the refinery. This was causing his business to lose its competitive edge. The same is true for tar sands. Those companies need a heat source to liquefy the tar, and as petroleum prices rise, it was no longer becoming economical to use their own fuel. I know that environmentalists are gnashing their teeth at the prospect of the Rossi Eat becoming defiled through this application, but fret not- in later years this source of energy will be relegated to the backburner.

Cruise ships will be the next to convert their boilers over to the Eat, and we will see large ships that are considered archaic by today's standards that use steam as the first to adopt this technology. Why is this? Diesel engines are more difficult to convert, as they would need a combustible gas as an intermediary that can be generated on-demand, and on-site, such as HHO gas. With diesels operating at the horrible efficiency in the range of 15-20 percent, it would further reduce the overall efficiency. Steam in this instance would be better suited, and that's what we will see. Converting expansion engines to run on steam is problematic at best, with corrosion of the internal parts being the biggest headache. So in the short term shipping will return to the steam age, with the difference being the E-Cat.

Power plants that use steam for power generation will also adopt it as well. Carbon taxes are certainly an incentive, but the E-Cat will be cheaper than coal in the future. Economics will drive businesses to adopt this technology. Will the utilities lower their rates? Perhaps, but they should be watched to make sure that they comply. Their track record shows that they try to maximize their profits to our detriment. Remember what they did to the oil producers in Midland. We predict that centralized power generation will be phased out in the long term, with a distributed power grid evolving to replace it. Which brings us to why this wills happen-

Rossi is releasing a home unit with a 5-10 KW capacity. That's a good start, but if say 2-3 of these are connected in parallel, you have a totally independent home. But- it gets better. Because if you're outputting all the extra power to the grid, the power plants need to generate less energy to keep up with demand. Power plants use natural gas for peak loads, and if they can start to rely on the extra power coming from a distributed grid, those “peaking plants” are no longer necessary. I know there is a good argument for being off-grid, and some will choose to do just that. But in the short term, consumers will want to remain hooked up to the grid as a backup. And that's where the distributed grid will begin to evolve.

Hospitals will adopt the E-Cat as a backup as a replacement for their diesel generators. This will first be seen in “hurricane alleys” where storms are sure to knock out the power. At first it would look like a step backwards, as the backups will be steam operated, but there is a solution for that one as well.

Unfortunately, it looks like air travel will be not be the first to convert over, as the capital costs will at first appearing to be prohibitive.

Proximal - 10-20 Years - The Period of Economic Renaissance

I know that there are those who would like a quick fix that would happen overnight. It would be nice for that to happen, but unfortunately, it took us nearly a century to get into this mess, and it will take an absolute minimum of 20 years to get out of it.

That being said, in this period the adoption of fusion is no longer a “quick fix”. It has had 10 years to prove itself, and even the skeptics have come on board. Now the conversion forges ahead, with a large fraction of conventional energy sources replaced with Rossi E-Cat, or perhaps the next generation by that time. Almost every home that can afford to do so has a unit in their basement next to their water heater. The distributed grid is a reality. No new power plants have been built, as there is no need to do so. The grid is updated to make use of the massive power distribution, and blackouts and brownouts are a thing of the past. Parents will talk to their children about the old days, and the kids, like always, listen in disbelief. “But daddy, WHY did they do that? Wasn't it silly?” Parents will just shrug their shoulders, and their descendants will roll their eyes.

It is in this period that aircraft will be built to utilize fusion power, first using rankine cycle steam turbines, and later going totally electric. Since the power source would be so incredibly cheap, long distance aircraft will first resemble the “guppy”, a military transport capable of swallowing a 767 whole without a burp. Presently, aircraft are small because fuel is expensive. That will no longer be the case. In flights longer than 5 hours, airlines will adopt a system similar to trains. There will be a dining area, as well as cabins for sleeping. There will be a real galley with fresh food prepared on site.

We will also see the renaissance of the airship- with a difference. Hot air, not hydrogen or helium, can be used for lifting this time, since there is a cheap source of heat. Once again, we will see leisurely cruises to distant lands while dining and traveling in comfort. This will become the cruise line of the 21st century. Not to mention the huge amount of cargo it can ship.

It is in this period that trains will adopt the E-Cat. Miniaturization will reduce the size needed, and we will see trains converted to steam-electric instead of diesel-electric. The turbines will be housed inside a soundproof container, and all you will hear is the sound of the electric motor. However, steel wheel on rail is only temporary. There will be a resurgence in train travel, as the impressive amount of power the E-Cat can produce will make the Maglev a standard, and transcontinental rail travel will be as fast as air.

Mining will adopt the E-Cat as well. They need something that doesn't consume oxygen, and this fits the bill quite nicely. Besides, they need to become acquainted with the technology before they begin to move off world.

The military will not be too far behind, with tanks with unlimited range and battle ships that only need service twice a year without constant refueling. The first to convert are the ones using fission reactors, as they are the easiest along with older ships using steam. Submarines will also use the E-Cat. We predict that remote military bases, as well as civilian research facilities such as those on Antarctica, will implement the E-Cat. We will also see it on the international space station.

Now lets go a bit further and see where it all goes:

Long Term - 20-50 Years - The Period of Space Colonization
Now we're cookin' with HHO. Up to this point, the conventional military and civilian space programs have been reluctant to adopt fusion, but renegades have been putting them to shame. Richard Branson, once he realizes that this is exactly what he needs for Virgin Galactic to take off (no pun intended) he will be working with us on the E-Cat systems to make sure that happens. Space tourism will be taking place a little before this time, and will see a massive resurgence with the adoption of cheap fusion energy. Unfortunately, first we will see it used in steam rockets. By the way, all the work was done in the 1950s when they were thinking of using fission reactors to do just that. A sci-fi, “Destination Moon”, was made along those lines. So the technology is there.

First we will be going to where the fuel is. You don't want to run your tank dry in the galactic hinterlands. Water ice was discovered on the Moon, and we know there is plenty on Mars. After that, we go to the outer solar system, and melt the ice to put into the tanks. With this technology, and a 1G spacecraft, every point in the solar system is accessible with one-week travel time.

It is at this point that mining concerns realize that there are billions of tons of metals out there in the asteroid belt just begging to be mined. Some of these are “Earth Crossing” asteroids that are easily moved into a stable orbit. At first “mining shacks” will be built, with space colonies for workers nearby. Gerard O’neill, “The High Frontier” and T.A. Heppenheimer, “Colonies in Space” outlined this in the works.

Man moves out toward the stars. Finally.
You want to live near where the work is. A weeklong commute is out of the question. So we will see colonies springing up where the resources lie anywhere in the solar system. In the long term, there will be billions moving off world, considering the Earth being what it is, the cradle of humanity, and thought of with fondness and reverence. There will be trips made to Earth, as a kind of pilgrimage to see where it all started.

It will be at this point that the third world finally frees itself of the yoke of crushing debt, as economics are changing back to real assets, and while the

industrialized world is shifting focus off world, they no longer need third world countries and their resources. They cut them loose, and those countries quickly recover their dignity in the process.

After decades of non-polluting technologies, the air is clearing. Oxygen is on the rise and the ozone holes are gone. Mankind has a future again.

This is what it really means. Let's make sure it happens.

Management

Roger Green, Managing Director

William Donovan, Chief Technical Advisor

Australasian E-Cat exclusive license owner Roger Green with Inventor Andrea Rossi, President, Leonardo Corp

Website being developed www.E-Cat-Australia.com

SUPPORTING EVIDENCE

United States Patent Application 20,110,255,645

The report is by Sven Kullander is the Chairman of the Science Academy of Sweden and Professor Emeritus of the University of Uppsala (Sweden); Hanno Essen is Prof. of Nuclear Engineering at the University of Stockholm (Sweden).

NASA's Low Energy Nuclear Reactions (LENR) Technology Video Clip Uploaded.

A two-minute non-technical video clip on LENRs has been uploaded to the NASA technology gateway website featuring Joseph Zawodny.

http://technologygateway.nasa.gov/_>http://technologygateway.nasa.gov/

http://coldfusion3.com/blog/nasa-publicly-reveals-lenr-research>http://coldfusion3.com/blog/nasa-publicly-reveals-lenr-research

Widom-Larsen Theory Simplified.

http://newenergytimes.com/v2/news/2010/35/SR35913widomlarsen.shtml

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NASA - RELEASE 12 JAN 2012

http://ecatnews.com/?p=1830>http://ecatnews.com/?p=1830

Prof. Focardi - This is an energy revolution

http://www.youtube.com/v/2cOEHQmnG-I&autoplay=1

Mats Lewan, reporter at NyTeknik after the E-cat demo

http://www.youtube.com/v/JWoaJ5NEj-w&autoplay=1

October 28 2011 Test of the 1 MW E-Cat Cold Fusion Device by Andrea Rossi.mpg

http://www.youtube.com/v/uFiJb2UhzqY&autoplay=1

See the E-cat run in self-sustained mode

http://www.youtube.com/v/gNhQIufkdL4&autoplay=1

Independent Proof

There is a "Independent Report by Kullander" and the famous Rossi-Focardi Paper". Here is independent evidence supporting the reality of the Dr. Andrea Rossi's E-Cat Cold Fusion technology. The report is by Sven Kullander the Chairman of the Science Academy of Sweden and Professor Emeritus of the University of Uppsala (Sweden); Hanno Essen is Prof. of Nuclear Engineering at the University of Stockholm (Sweden). These gentlemen are experts in their field, and have reviewed the data as an independent peer review, lending credibility to the process.

This highlighted comment is by Sven Kullander the Chairman of the Science Academy of Sweden and Professor Emeritus of the University of Uppsala (Sweden); Hanno Essen is Prof. of Nuclear Engineering at the University of Stockholm (Sweden) and former chairman of the Swedish Skeptics Society. Their reputations are obviously on the line. To make such a statement they must have been very sure of what they observed.

Concerning the 28th October test of the 1Mw E-Cat device in Bologna as quoted:

"The primary reason for the 28th October test of the 1Mw E-Cat device was a performance test for the Customer. The Customer controlled it. The public were invited I believe, to witness the test as further evidence of the veracity of the E-Cat technology. The public or any particular group of scientists/journalists did not primarily arrange the test for independent testing of the E-Cat device. The E-Cat was not yet fully protected by worldwide patents, and thus it seems quite reasonable that the public would be excluded from various parts of this performance test. There is certainly no radiation coming from the device or any

radioactive waste accumulated in the device. Andrea Rossi has confirmed this to me in writing. "

Of many and numerous experiments and demonstrations of the E-Cat technology, including the 1Mw demonstration on the 28th October, 2011 in Bologna, these details of a test done on the 29th March 2011, prove the veracity of Andrea Rossi and the E-Cat technology because of: The qualifications of the observers * The clarity of their observations * The clarity of documentation of their observations * The independence of the observers.

I'm sure these figures are very conservative, since to make the initial sale of the 1MW heating system he ran it with NO POWER INPUT FOR 5 HOURS, continuously generating over 470Kw/hr.! This is a COP of infinity! Even so, COP (Coefficient of Performance) of 6 has never been produced anywhere other than with uranium to my knowledge (if natural radioactivity is not considered input power). Of course with uranium apart from being lethal and very dirty, a great deal of energy goes into creating it in the first place and thus it is an extremely dirty and expense fuel.

Please note: there is evidence that the E-Cat can be "toggled" between self-sustaining mode requiring no power input, and powered mode running with a COP of 6.0. What this means is a NET COP OF 12.0!

More References:

The second law of thermodynamics is still intact.

Please see: http://peswiki.com/index.php/News:October_28%2C_2011_Test_o

It did make some headlines.

http://ecat.com/news/cold-fusion-is-heating-up-in-mainstreammedia

HERE IS AN INTERVIEW OF THE USA COMPANY

http://www.nyteknik.se/nyheter/energi_miljo/energi/article3179019.ece

Here is info on the UK Company that has the license

http://www.nyteknik.se/nyheter/energi_miljo/energi/article3347150.ece#comments

He meets a USA governor - first USA press release

http://coldfusion3.com/blog/major-us-newspaper-covers-andrea-rossi-coldfusion

Here is a clear, simple and accurate talk by Lewis Larsen, one of the inventors of the Widom Larsen LANR Theory. If you are interested in understanding how the world is now going to change to clean green inexpensive endlessly available energy, have a listen.

http://ecatnews.com/?p=1604

e·cat

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In near future- the energy conversion into electricity (soon to be realised- possibly 1-2 years) will be linked into the www.ecoglobalfuels.com system to produce a 100 % carbon neutral ethanol, produced from our unique and independently validated hydrogen IP process, combined with waste CO2 and which sequesters up to 130 % via by-produce algae and bio-char production: read more at our website.