The Future Only Feasible Power Generation is Unextracted, Unarranged but Self-Manufactured!

Eighth Energy: the people energy independence by ecological and economical Energy

POWERENG 2013, 13-17 MAY, ISTANBUL

The Comparative Genetics Explodimetrics by Paolo Canevese

EEGa, Explosives Energy Gate, to Future

The Power Future without pollutant Fuels, fossil and nuclear
By Pacanup Organization, Italy - Milan
blow@pacanup.it; www.pacanup.it

Abstract—**This work illustrates The EEGa System, Explosives Energy Gate, by the Comparative Genetics Explodimetrics Study, to electric power for the electricity generation.**

NEW POWER GENERATION: the change from the age of fossil and nuclear fuels, polluting and destructive, with the new, inexhaustible, environmentally friendly, natural and selfmade "explosives" from the Genetics Explodimetrics.

The birth of EEGa starts with the distinction between two energy properties of the elements that can produce them, academically known as "Energy Content" the first and "Energy Capacity" the second.

The "Energy Content" is the expression of the energy emissions of each element that, as per universal convention, is able to generate an energy emission today considered as heat, by an exothermic combustion reaction , by the combination of O_2 molecules. The quantity of energy obtained is named "Calorific Value", expressed as kcal/kg-m^3 of a substance called "Fuel", solid, liquid, gas or nuclear that will produce water steam under pressure, this will subsequently move electrically powered machines with low efficiency.

On the other hand the "Energy Capacity" is the expression of an energy emission produced by one or more explodimetric reactions with an excess O_2 molecules, that will be emitted in the atmosphere; in this case the main energy emission is not thermal but an immediately available force, Direct Work (Explosive Work) that is expressed in Pacblow (kgm/kg)/μ, that is typical of each explosive material.

This two circumstances have created the necessity to verify the sense of three questions to all the scientific world, questions that up today nobody is able to answer, even not partially :

1) How many kWh(e) can be extracted and utilized by 1 Kg of TNT, NTG, A Gum, Semtex 3, black powder and in general by 1 kg of explosive, for civil or military use, self-made and at reasonable costs ?

2) How many petrol liters should be used in a military gun to produce ,with the normal Bond Energy it has, a stone of 500 kg, at a distance of 300 km, in 9 minutes ?

3) How many methane gas m^3 have to be used to demolish , with the normal Body Energy it has, in 1 minute a building of 10000 m^2, on two floors, 2 ceilings, 1 roof, with 900 CA 40x40, 10 mt pillars, without any wall of window.

The lack of any possible answers, even purely academic, to questions n. 2 and 3 and their apparently non sense, have generated first the Pacanup pressure explosion stock system (Fig. 3) for the traditional generators, and then Genexploder I and the Explodìmeter Kaly for the direct work.

Keywords: EEGa compound

I. GENEXPLODER I° AND EXPLODÌMETER "KALY", THE ONLY ENERGY OF FUTURE WITHOUT FUELS

A. Working Ready Prototypes

Genexploder I° : The first and the only electrical generator in the world working with explodimetric reaction by the explosive, ecological, that can be manufactured and not extracted like the normal polluting fuels, or by the doubtful renewable sources and technology (ENERGY is uncertain without sun, light, wind, water and biological waste).

Explodìmeter, similar polar advance: Power Range laboratory instruments to be used with the Genexploder I° for the selection and calculation of explosive doses for the optimum feed of EEGa, with the immediate result of the work intercept-able from them expressed directly in watt x second.

Functions: EEGa System (Exploder System) manages, by trimming them, mini explosions generated by suitable commercial explosive charges (Cost 0.5-1.0 €/kg). The working effects of these charges (practicability of tangent impact $\mu \leq 0.76°$) applied and distributed on big masses kinematically sensitive to the rotatory movement (stimulated by the Bother Binary Actuator in the Proper Molecular Shock Reaction) produce a balanced and constant Mass Movement

and energy emission (direct work by Explosion Work in kgm x kg) of combined extension transformed afterward directly In Polar Electricity received and measured in kV, (and from 85 to 235 kWh/kg, efficiency 62-83%) transferable in the normal net in high voltage and immediately operative. In practice all the parts of a very big electrical generator (bi-alternator from 6000 MW and more) are placed in constant rotation - (which is inconceivable for the systems fed by pressure of the water steam, obtained with polluting fuels) - with much higher efficiencies than traditional thermal cycle and costs 3 - 5 times lower, by using explosive of civil and war origin, even recovered, not extracted like fuels but produced with universally endless raw materials (% of ammonium salts and so on) and plants self-made. So electricity could be produced at 400 kV nonstop (without the use of fuels and alternative energies) with up to 3 – 5 times lower final costs versus current costs.

Important Observation: The fuels is burning and to burst but not to explode: the Power Emission is the heat (to water steam under pressure towards the turbo alternator); the explosives is exploding and to burn but not to burst: the Power Emission is instantaneous Newton Forces directly to working (kgm/kg).

II. PRINCIPLE CHARACTERISTICS

1) EEGa will substitute all the polluting energetic fuels (nuclear and fossil with CO_2, NO and radioactive waste emission) and will eliminate the planet overheat because the explosive reaction generates only O_2 in the atmosphere, cogeneration heat and filterable heavy powders and will guarantee the complete people energy independence by the independent manufacturable raw materials.

2) The Proper Molecular Shock Reaction: it is a pyramid reaction that develop the maximum energy intensity, by a molecular shock via a not stable electrical system with an instantaneous frequency controller applied on the instantaneous periodical microwave convergence. This is generated on the tuning of max reactive molecular stimulated composition, in any case linked to the structural energy emission and the interactive capacity characteristic of the element used for energy extraction.

3) The Bother Binary Actuator System: is the generating binary system of the accessibility condition to the explodimetric reaction, this ends with the direct kinetic charge applied to mobile body that let work the electricity generating machines. This consist of sending and receiving a "bad" impulse device with a defined quantity of explosive to another receiving device with the same binary signal amplification of the reaction that produce energy to be transferred and applied to the receiving body.

4) $\boldsymbol{\mu \leq 0.76°}$ is the angular width of the volume of the cone containing all the operative energy quantity, spherically composite, of the explosive reactions concentrated in the cone volume that manages the used dose produced with Proper Molecular Shock, that with the input produced by Bother Binary Actuator generates, by Pacanup effect, instantaneous Newton Forces (these come from the violent expansion of the gasses into the operating component within specific volumes, as in the traditional volumetric Trauzl, and they are intercepted inside the organically sensitive structure of the molecules so as to be stimulated and react with energy emission by forced conditioning) towards the kinematic end user system.

The scientific formulas that identify the practical application applied to all the system EEGa, has not been used in this article due to the lack of academic references and nomenclature available in the scientific circuit. Up today no one have made any research on the possibility to change the energy source from fuels to explosives, by the use of two opposed Power Systems, changing the energy emissions from the Indirect Work of the fuels (heat = water steam under pressure x movement of electrically sensible parts = not remunerate yield) to Direct Work of explosives (Instant Newton Forces x direct move of bodies sensible to the cinematic drag of electricity producing machines = work with remunerative yield). The explosives are environmentally and energy friendly, immediately available, emission free and with the possibility of cogeneration.

5) The profitable use of explosives instead of fuels in electricity production is due to the comparison of the real energy capacity between the two. Considering the normal power range and characteristics of the materials used allows to arrive to the following principle: the fuels produce thermal energy, not immediate work, burning and exploding while the explosives generate direct immediate work. In table I° the main characteristic of some of the explosives that can be used in electricity production based on their capacity to generate "direct work", together with the Specific Pressure and Energy Capacity.

6) A part of Genexploder I° now is not patented (the patent is expected only by the Owner). Its introduction into the investments for a new energy future could result in the immediate collapse of the traditional energy markets (methane, oil etc). The new system would have to be owned and managed by Normal Profit Financial Organizations not involved in markets speculations, but devoted to the worldwide reclamation and disuse of traditional thermal cycles, even in the winter heating systems that will become all electric at low cost and nonpolluting.

7) The alternative energy systems (aeolian, solar etc) will not be affected because of ecological nature like explosives of EEGa (now the Ecological Systems to compensate to only 4 – 8 % of the full energy).

8) The EEGa value on the energy markets, as defined by the World Financial Economy, ranges between 1500 and 2000 thousand million (billion) Euro calculated from the saving of traditional fuels (methane, carbon, nuclear, oil and so on) used to produce energy in GW•h in 10 consecutive years, substituted by the consumptions of the EEGa explosives to generate the same quantity of electricity in the same period of time, excluding all the economical advantages of having a better world environmental situation , starting from **the concept that to control, to contain or eliminate the world global pollution and planet overheating, it is not enough to try to reduce them, it is necessary not to produce them anymore.**

9) The destructive drive of explosives (systems to wars, to death, to violence and more) go, at last, to kWh! After 35 years (and more: from 1650 until today) of the dedicate research.

10) Investments in 35 years of experiments: 6 ML EURO.

11) The test equipment is at disposal, with the results of testing and experiments.

III. ENERGY REPORT

We will avoid the use of formulas linked to empirical hypothesis we will use data that comes from the correct development of calculations obtained from raw materials energy capacities, specific pressures, explosion work, residual heat, explosion velocity, Trauzl and Strength test, kinetic data, specific effect, mass movements, specific yield.

The system is based on a direct tangent collision, that creates a constant rotation generated by the shock wave of the reaction gasses on a bi alternators of 12000 MW and 50000 tons at 400 KV and mono alternators at 1550 MW with the flow from a stock of compressed gasses at high pressure.

In this article there are measurements not linked to the energy content of fuels because there is no connection with the energy capacity of the explosives, based on the distinction between "content" and "capacity". In any case here we confirm that explosives have an energy capacity 10 times higher than fuels so it will be much cheaper to transform all heating systems in the houses from fuels (methane, carbon, petrol) in electric system generated by the residual heat of explosives.

A. Quantifications

We will now indicate some typical values of operating conditions in which the most common explosives work, followed by some real values of productive and management costs, performance and proceeds and of costs of the times, methods and production phases, of the continuous and security supplies, of the consumptions and of the surety stocks:

- specific pressure (kg/cm^2) **P** 10000 ÷ 12000
- explosive work (kg m/kg) **L** 550000÷750000
- explosive velocity (m/sec) **V** 6500 ÷7500
- density (kg/dm^3) **K** 1.4
- Trauzl (cm^3) **T** 500
- specific consumption (gr/tn m) **Cs** 100÷60÷40 (from Proper Molecular Shock, by Bother Binary Actuator)
- Unit of measure **1 Pacblow = 100.000 (**kg m/kg)/µ
- specific yield **Rs** 1/1.3871=0.7209=100%
- raw material average cost **Cm** €/kg 0.5÷0.8
- Raw mat. Product plant cost (7÷8 ton/h) 10 Mil EURO (850 MW installed)
- Energy/Consumption cost (€/kWh) CE EURO 0.012 ÷ 0.015 (yield 65-75%) (€/kWh)
- Plant Construction time (850 MW) 36÷54 months

  Introduction and start up phase 12÷18 months

  Experimental plant construction time (1÷10MW) 12÷ 24 months. With different types of explosives (dynamite, TNT, C4, ...) with values 1.5 – 6.0 the energy capacity expressed as kWh/kg are in a range 65 – 325 with yields 69 – 81%.

These costs, which have been acquired on the raw material markets and on the raw material production plant design and installation markets, can be considered as relevant parameters to evaluate the economic feasibility of the new EEGa system. We remark that such evaluation cannot be carried out by comparison to the present energy technologies (including the ones related to the alternative sources), since the raw materials are endowed with a completely different "energy identity" from the fuels which are traditionally employed for electric power generation. Therefore, in Table I we report a comparison of the operative characteristics of some well known products.

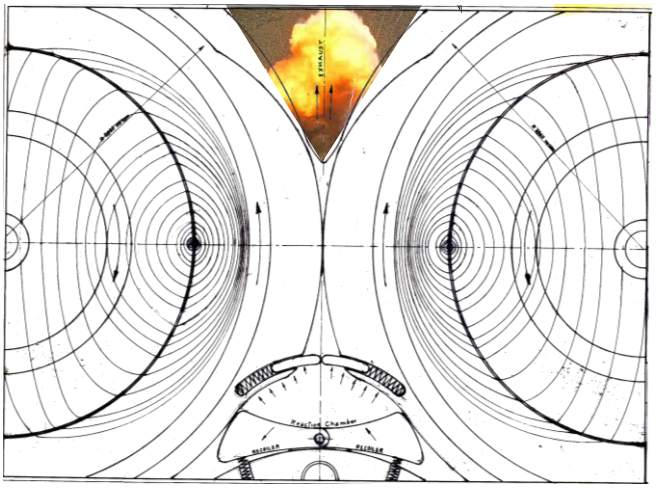

Figure 1. Direct Tangent Collision ("direct bump") by the Genexploder System on a 12000 MW bialternator (where the stator and the rotor rotate in opposite directions)

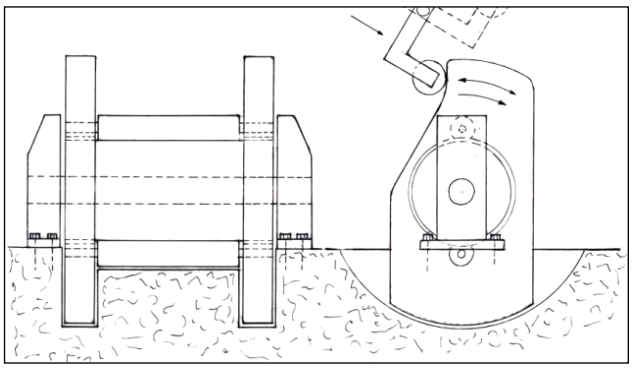

Figure 2. Indirect Tangent Collision ("reverse bump") on a 850MW mono alternator, by an instantaneous pressure stroke from the Pressure Stocking System.

IV. COGENERATION

In the explosive reactions there is a big production of heat that can immediately be used as:

- technological steam,
- home heating systems (transformed as electrical with great savings in electricity costs and pollution),
- traction of vehicles with rotating engines or electrical engine with a net of low cost recharge stations.

TABLE I.

	Density (kg/dm^3)	Explosive work (kg m/ kg)	Specific pressure (kg/cm^2)	Explosive velocity (m/s)	Trauzl (cm^3)	Strength (%)	Fumes	Reactions with mandatory O_2 emission
A Gum	1.55	687470	12715	7500	570	100	acceptable	OK
Gelignite 1	1.45	461100	10280	6550	435	90	optimal	OK
Gelignite 2	1.42	452620	9730	6100	405	85	optimal	OK
Gelignite 3	1.55	424885	8418	6100	390	80	good	OK
Vulcan 3	1.05	397535	9174	4500	350	70	good	OK
Quarry extra 2	1.05	439810	9859	4550	340	70	acceptable	OK
Quarry 1	1	423584	9498	3800	325	60	no data	OK
Sismic 1	1.54	471835	8382	6400	360	84	no data	OK
Sismic 2	1.55	407785	8955	6600	450	87	no data	OK
Petrol	0.92	11462	584	618	84	n.r.	CO_2+NO	
Methane	0.00072	12418	428	496	68	n.r.	CO_2+NO	
Coal powder	1.11	6941	499	314	75	n.r.	CO_2+NO	

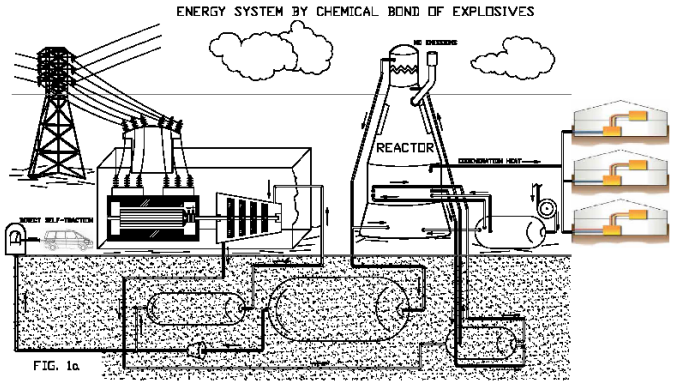

Figure 3. The actuation principle of the energy collecting Pacanup System is storing pressured gas at 10.000 Ate, for electric power generation; cogenerated heat can be employed for different uses

V. CONCLUSIONS

In more than 35 year of expensive and wrongly considered "dangerous" experiments the EEGa projects proves that it is possible a production of clean electricity , with no limits, with final costs 3 – 5 times lower than normal fuels even nuclear with no link to extraction, pollution, planet overheating, or costly and risky nuclear power stations.

It is necessary to create more knowledge, more consensus in the scientific and technical world to pass from a natural skepticism , due to not knowledge, to a new interest in the study of this new solution from anybody interested in finding a real alternative energy .

More simply we have to think to use the same power of the old times when the explosive were used to send stones for wall destruction , for example a big wind turbines could rotate even without wind shooting against the extremities and generate electricity depending on the quantity, intensity and frequency of the shot, or a small wind boat could have electricity on board without electric generators only using a manual compressed air device.

As a final remark we propose:

A. Proposal of a Modification of the CE Resource Power Graph

Taking in consideration the experimental result s we can propose to insert EEGa, as first Energy Research Integrated Program, into the range of "Chemical Bond" Energies in the diagram of CEE energy research programs (see Fig. 4 (a) and (b)). In this way we could decrease of more than 90% the pollution and overheating changing the thermal cycle of standard fuels to explosive and production low cost electrical energy.

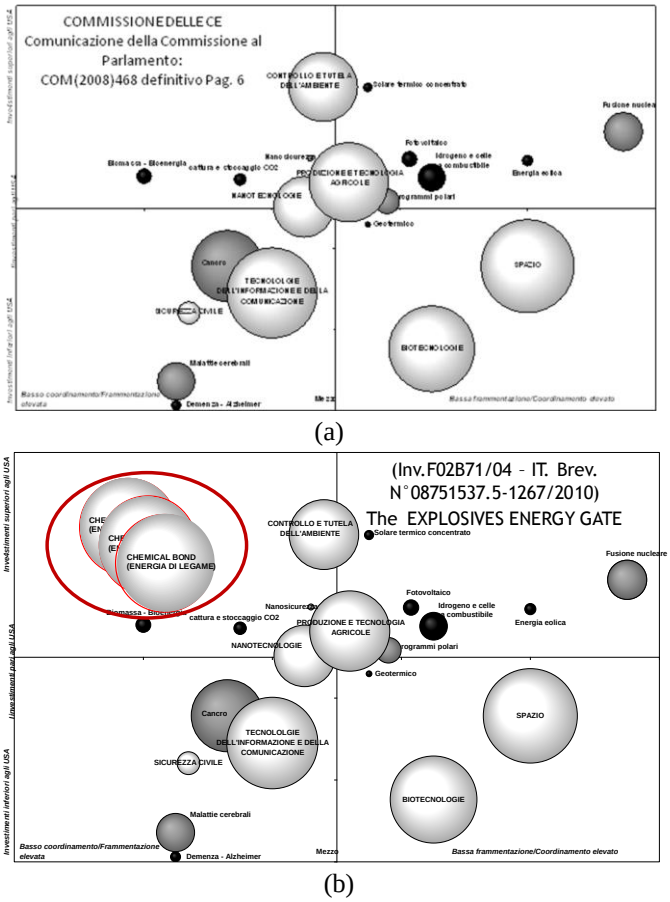

Figure 4. (a) Graph of the CE supported economic effort for Energy Research; (b) Out proposed graph for new volumes in CE Energy Research

ACKNOWLEDGEMENTS

The present article do not have any reference to existing experiences or studies with the exception of the characteristics of the available raw materials, the explosives, used in a different way.

Consequently I want to thank people and organizations that even without knowing have helped in our research, by the competent following contributions of the 3 didactic forms to get ready and to allocate to selected Universities where the Pacanian Statement will be illustrated. The statement has derived, from the explodimetric genetics, the formal elementarity of the exploding capacity of all monoelements which are reactively sensitive, provided that they are suitably stimulated to release Joulean work in any dedicated condition; this way, for each such condition, among the elementary energy capacities which are universally acknowledged and developed, Immediate Work will be obtained as a necessary behavior of the stimulated element. This work will have to be scientifically verifiable and physically quantifiable, both conceptually and numerically. Therefore, Energy Research will be able to stop to be after thermal capacities to be converted into kinetic capacities with very low efficiency.

However, with an earthy motivation, we have to ask ourselves how effectively efficient our research is in using and exploiting Elementary or Complex Energy Forms which are either directly usable or at least feasible in that direct work can be drawn from them. Besides, at present it is still difficult to compare numerically the effects of direct work production and exploitation with the results of the indirect thermal exploitation. For instance, without thinking of explosives like TNT, C4, NTG, etc., how many joules (i.e. mechanical work) can be obtained instantly from the (feasible) explosion, instead of the usual combustion or the fast combustion (blow up) of the CH4 molecule or of the common fuels? And with what by-products or reaction waste? Therefore, starting from the conventional Explodimetric Genetics studies, the three mentioned specific subjects are derived, which can be described synthetically as follows.

REACTICA 1: a still non-existent term in the research about the Genetics Explodimetrics Study by explosives; it deals with non-destructive energy research, and it collects the nomenclature about the chemical and physical processes of degeneration and instantaneous alteration of all those exploding materials which can be dedicated to electricity generation, in particular the ones which do not produce significant combinations with the O_2 molecule, only for the reject combustion reaction. For instance, one of the main concerns is a material energy capacity (instead of its energy contents), which can be natural, artificial or experimentally composed and delimited, and it is comparable to power efficiency traditional parameters in electricity generation.

REACTICA 2: It describes and delimits the performances and the reactions of all the building materials selected and consistently qualified on receipt of the effects caused and derived from reactive processes of the raw materials (included amalgams, mixtures, experimental elaborations dealt with by REACTICA 1). Both building and secondary materials have to be tested against the effects of the receiving, gaining and resisting to energy emissions of the project and have to satisfy the Regulations Certificate (to be instituted), which has to be compulsory and defined by the limits decided by the derivation of the non-destructive civil and military energy generation. Therefore, REACTICA 2 characterizes the operating enclosure of all the procedures of the pickup and acceptance of the effects of the explosive processes by the employed building materials and by the realized final systems assisted for the direct and continuous transfer of pressure power into High-Voltage Electric Power (HVEP), for its accumulation and for its consumption in factories and, in the future, vehicles (figure 1).

REACTICA 3: It includes all the equipment and the organization of the laboratory research, simple and applied, about all the context enclosing this subject treatment, but only for the purpose of extracting and immediately utilizing pressurized or direct power derived from explosive reactions expressed by all raw explosives; these cannot be defined as fuels, although they can express a limited combustion capability (not the only one by Chemical Bond). REACTICA 3 does not imply promiscuity or possible alternation with REACTICA 1 and REACTICA 2 because this is the only strategic connection to advanced military explosive technologies, in view of the transfer of the bigger explosive power to the best energy generation for civilian consumers, economically profitable. Besides, REACTICA 3 includes the organization of studying, researching and certificating the environmental and atmospheric emissions of the process solid and gaseous reject; it also has to decide the quantities and typology of the laboratory research products which can be manipulated and their normalization level.

It is very important to remark that all the results of this research which have been obtained so far have been elaborated by self made experimental and research devices, because these are not available on the traditional Instrumental Markets of the energy sector, which are at the moment qualified only to the treatment of the explosives offensive and destructive functions.

REFERENCES

Chalon, Clapeyron, Mancini, Occella, Talobre G., Seguiti T., A.F.T.E.S. US Report 656, Davydoy, Ass. Mineraria Subalpina, L. Gerbella, M. Duriez, M. Bickford, Rittinger, Kick, Reynolds, Antonioli G.

PROTECTIVE MEASURES

Pat. N. 08751537.5-1267/2010onPCT/IT/2008/000223Inv. F02B71/04/2008, appl. MI2008A000416 of 2008/13/03, with rev. It. N. 0001387086/2011, of the Pressure Stocking System, by Paolo Canevese, Milano, Italy. All these patents are industrially practicable.

Reminder for a hopeful future: a**ny practicable alternative is better than uncertainty.** *Paolo Canevese*