Cheap and Safe Cold Synthesis Generator
LENR –ENERGY

Me-H LENR Reactor

Metal hydride Cold Nuclear Fusion thermal generator - generator is cheap and safe energy based on the Low-Threshold of Transmutation of Nuclides, Low Energy

Nuclear Reactions LENR, Cold Fusion, Cold Nuclear Fusion, Low-Energy Nuclear Reactions LENR, Low-Threshold Transmutation of Nuclides LTTN

Project LENR ENERGY

Website lenr.su

Moskow, 2019

What is LENR?

- LENR (Low Energy Nuclear Reaction) is a low — energy nuclear reaction or nuclear reaction occurring at lower temperatures and pressures than a hot fusion reaction.
- An example of natural hot fusion can serve as the Sun, and artificial - the explosion of a thermonuclear bomb.
- The advantages of LENR compared to other types of nuclear reactions:
- no hazardous levels of radiation "soft terms" startup and operating mode handling process, the cheapness of energy produced

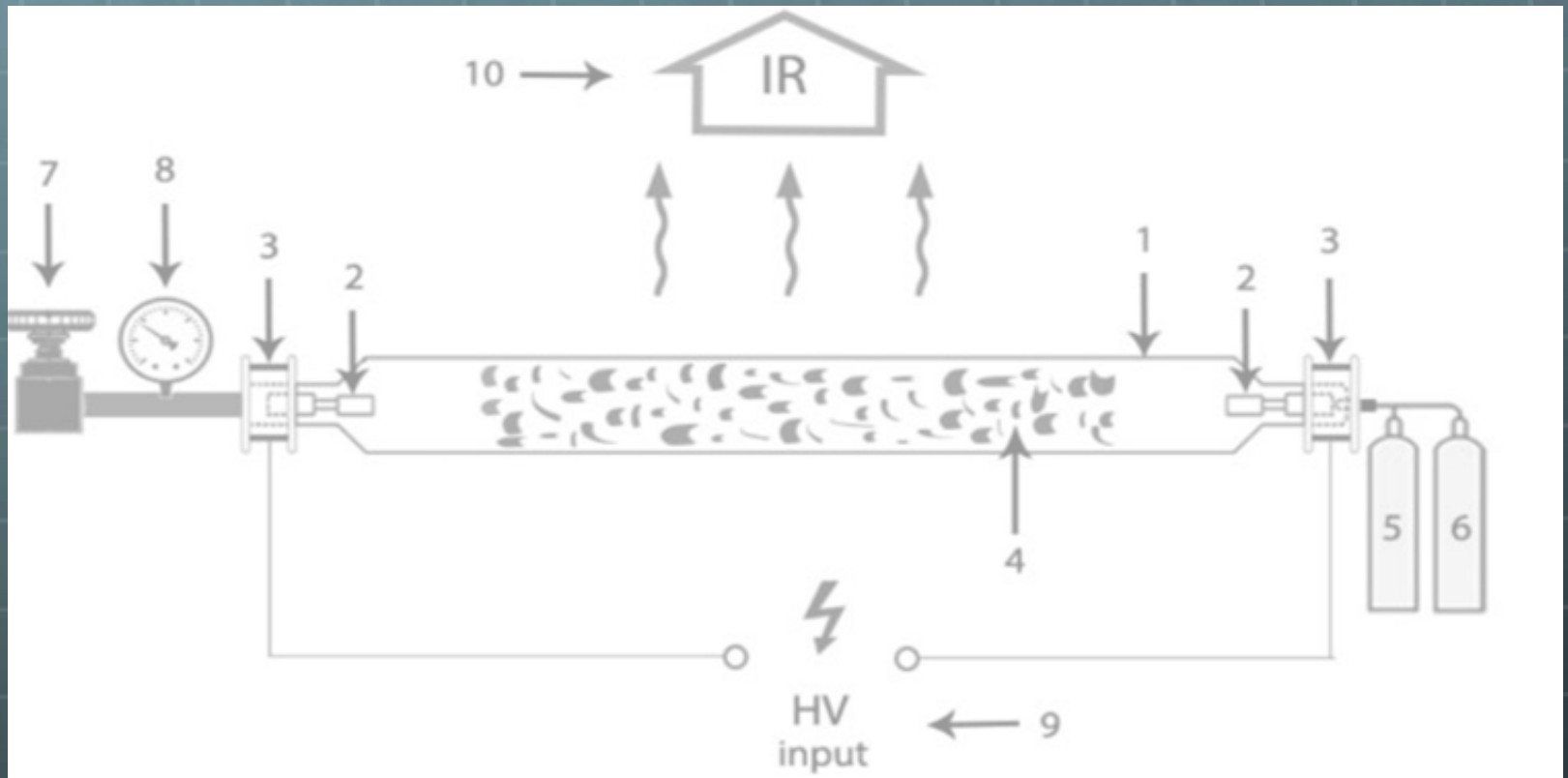
Historical information on LENR

- 1957 - I. S. Filimonenko (USSR) - proposed a new way to produce energy by electrolysis of heavy water
- 1989 - Fleishman, Pons (heavy water electrolysis on palladium electrode)
- 1994 - Fokkardi, Pianelli (Nickel - hydrogen LENR reactor)
- 2012 - Rossi (E-Cat)
- 2015 - first successful experiments in LANE ENERGY Laboratory on the launch of Mah LENR Reactor

Me-H LENR Reactor

- Hydrogen is used as a source fuel in small quantities.
- Inside the reactor, in the presence of a catalyst and an intermediary gas, the nuclei of hydrogen isotopes merge in the crystal lattice of the metal (or a mixture of metals), accompanied by a significant release of thermal energy.

Installation concept



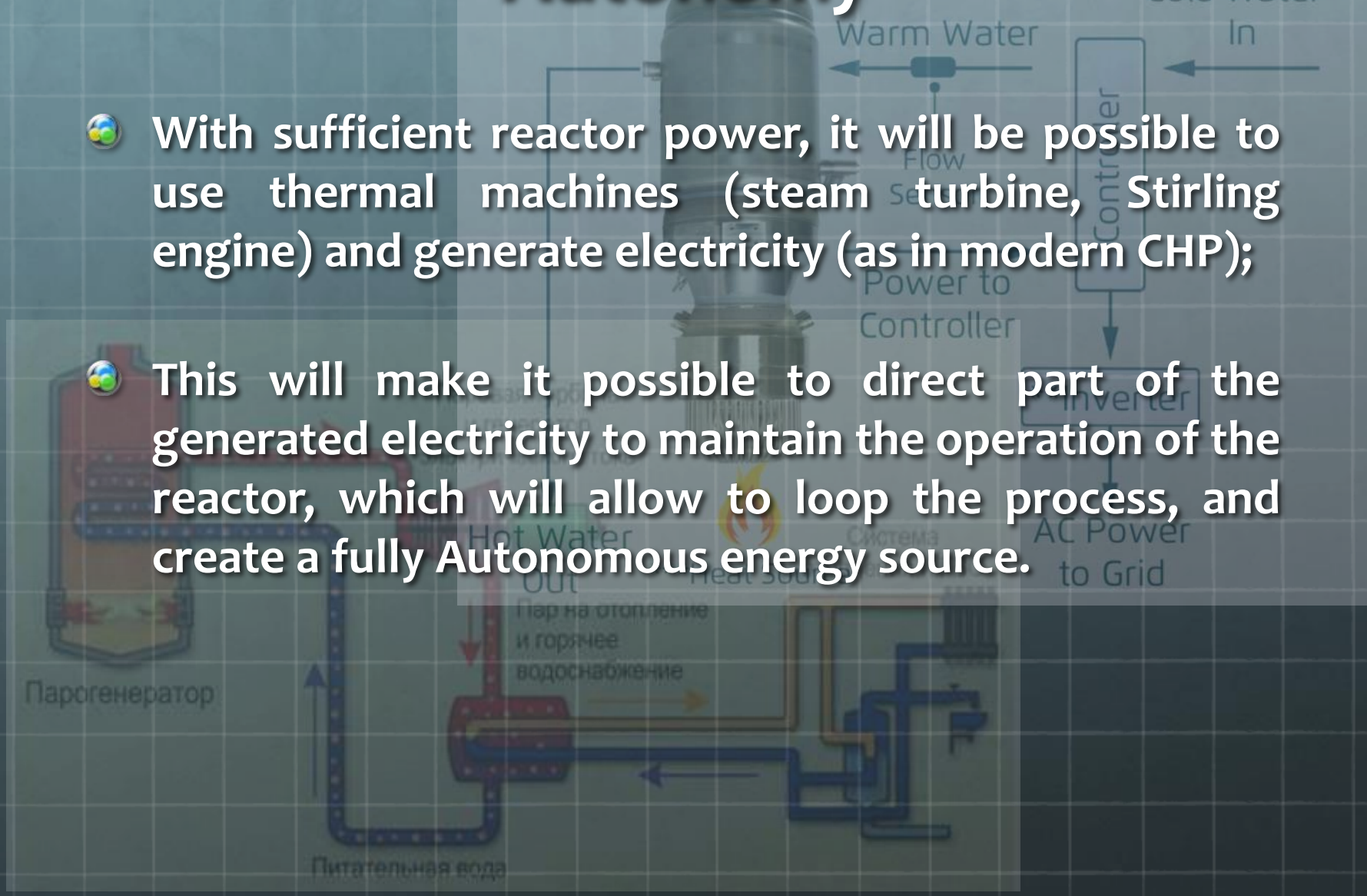
1. Dielectric body 2. Tubular high voltage electrodes 3. End flanges
4. Hot zone of the reactor (filled with proton conductivity) 5. The cylinder filled H2 / D2
6. Cylinder with a gas additive (Ar, Xe) 7. Relief Valve, purge-safety 8. Pressure gauge
9. High voltage to support gas discharge 10. Outgoing heat energy

Energy efficiency

- According to preliminary estimates, the heat generator with a capacity of 10 kW will consume hydrogen in an amount that will not exceed $40 / year;
- The energy conversion factor (ECF) – in the first laboratory samples about 5, with further development of technology, improvement of facilities and increase in the volume of the reactor-is expected to significantly reduce the specific energy consumption.

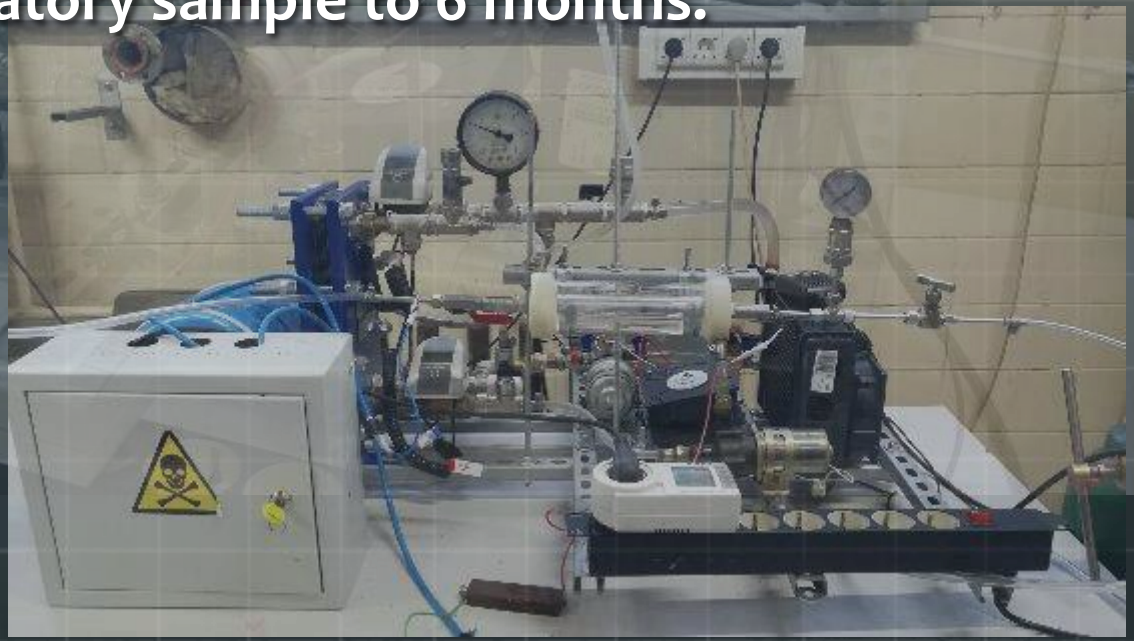
Autonomy

- With sufficient reactor power, it will be possible to use thermal machines (steam turbine, Stirling engine) and generate electricity (as in modern CHP);
- This will make it possible to direct part of the generated electricity to maintain the operation of the reactor, which will allow to loop the process, and create a fully Autonomous energy source.



Prototype

- It is in a high degree of readiness, in the photo one of the prototypes in the manufacturing stage;
- The expected time to the creation of a smoothly functioning laboratory sample to 6 months.



Advantages of Me-H Reactor

- A huge consumption of fuel by orders of magnitude superior energomost hydrocarbons.
- Long service life-a one-time filling of the product will last for the entire service life (2 – 5 years).
- High reliability.
- Relative simplicity of the device.
- Unlimited scalability.
- Resistance to external influences – temperature and humidity, electric and magnetic fields, including powerful EMI, radioactive radiation.
- Complete absence of toxic emissions and hazardous waste.
- Good controllability of the reaction. Possibility of how fast
- Start and stop in case of emergency.
- High level of safety during operation.

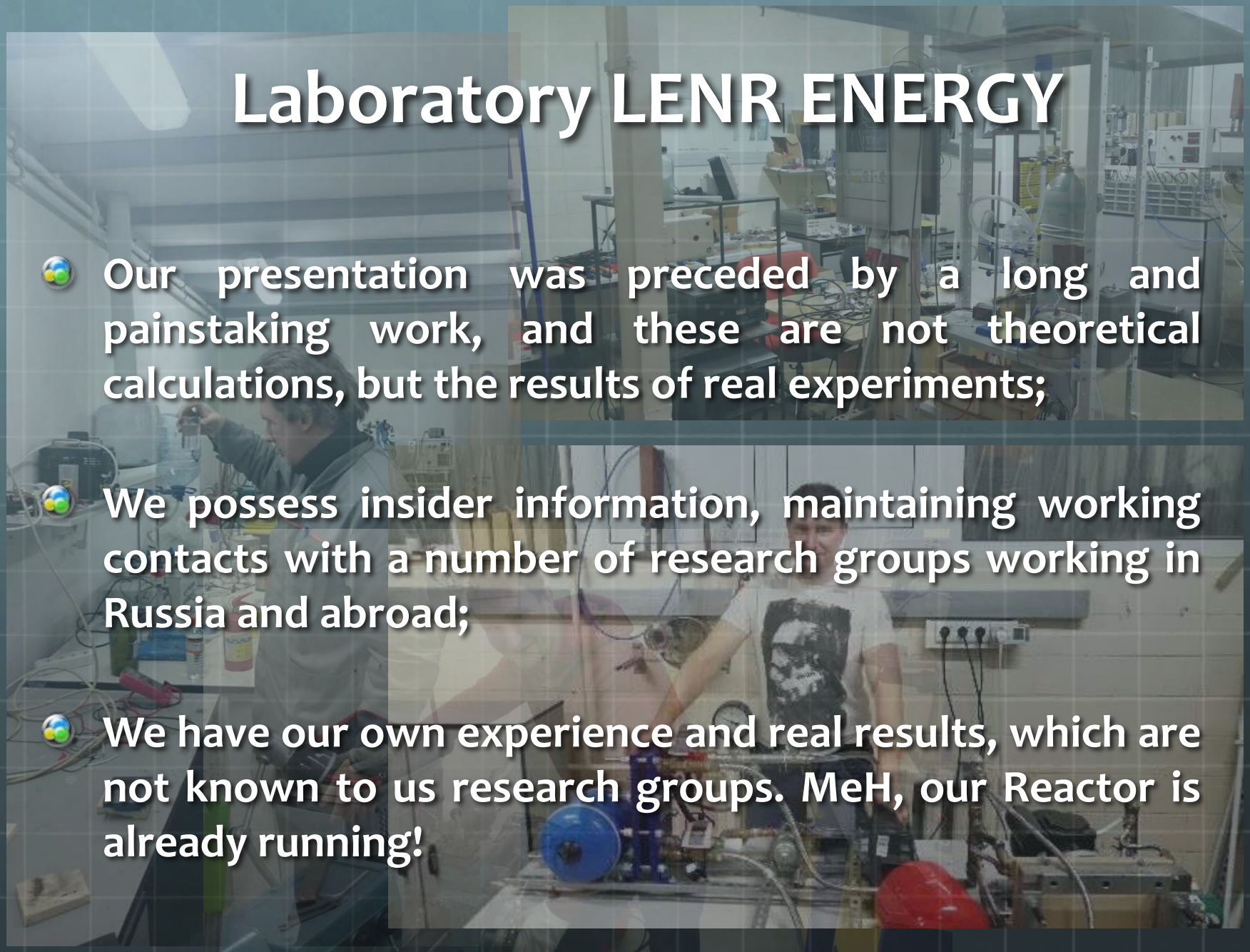
The future of the technology

- Heat supply – heat supply plants and residential complexes;
- The power industry is the creation of a CHP (combined heat and power) with LENR – heat source as a steam to power turbines;
- Vehicles with virtually unlimited range;
- Aerospace technology-the creation of aircraft that use air as a working fluid with unlimited range and flight time. Spacecraft can use inert gases as a working medium.

LENR-ENERGY project - road map

- Creation of a stable working laboratory sample - the basic prototype of the reactor (6 months);
- Creation of the first pre-industrial samples, testing, research and resource testing, development (2 years);
- The establishment and test operation of a private power plant (CHP);
- Profit from the use of its own energy center;
- Sale of technology worldwide, the continued development of technology, mass adoption across all industries.

Laboratory LENR ENERGY



- Our presentation was preceded by a long and painstaking work, and these are not theoretical calculations, but the results of real experiments;
- We possess insider information, maintaining working contacts with a number of research groups working in Russia and abroad;
- We have our own experience and real results, which are not known to us research groups. MeH, our Reactor is already running!

Invest in the future!

- The transition to new types and methods of energy production is inevitable. LENR technology is a global development trend.
- Having supported our Project at the very initial stage, it is possible to occupy a significant niche in the Energy Market of the not so distant future.
- We invite you to mutually beneficial cooperation!

Thank you for your attention!

With best regards,

LENR – ENERGY

More information on the website lenr.su