

In <http://www.pendulum-lever.com/theory-maths.html> you find a theoretical discussion of the Milkovic pendulum.

E.g. Prof. Bratislav Tosic, Ph.D. estimated that the input of gravity in the performance oscillator is around 80%.

What does this mean? Could it be that he will say that 20% of energy (of the generated energy) is inputted to the small pendulum and that 80% is delivered from the gravity?

That would mean that we have a COP = 4:1. Gravity energy is free – I think. We have not to pay for it.

Here are additional theoretical evaluations:

http://www.pendulum-lever.com/docs/Dr_Zoran_Markovic_Two-Stage_and_Three-Stage_Oscillator_as_a_Compressor.pdf

This work has the goal to clarify the attitude of Mr. **Veljko Milkovic** who **came to the conclusion that** from his two-stage mechanical oscillator **can be extracted more energy than it was invested in.**

Further you can read: ...Because of the above reasons (complex dynamical system) it is hard to calculate **Over unity** which **certainly exists** in twostage oscillator invented by Veljko Milkovic, **because energy is produced** under gravitational influence, **or “gravitational energy” is transforming into kinetic energy.**

Conclusion: Here is presented a **new theory**, the theory which **says that an impulse force** which acts on a body in the state of motion **does accelerate not only its mass, but existing kinetic energy too.**

http://www.pendulum-lever.com/docs/Colin_Gauld_Physics_of_Two-Stage_Pendulum_Oscillator.pdf

http://www.pendulum-lever.com/docs/Nebojsa_Simin_Energy_Surplus_Phenomenon.pdf
“Energy surplus” in pendulum and two-arm lever system by Prof. Nebojsa Simin, B.Sc. in physics, Novisad, Serbia

...At least one if not a greater number of experiments that **Veljko Milkovic** has conducted, obviously and undoubtedly **indicates that the energy invested** to maintain the oscillations of the pendulum **is multiplied**, which **defies the conservation of energy law.**

http://www.pendulum-lever.com/docs/Nebojsa_Simin_Free_energy_of_the_oscillating_pendulum-lever_system.pdf

FREE ENERGY OF THE OSCILLATING PENDULUM-LEVER SYSTEM by Prof. Nebojsa Simin, B.Sc. in physics, Novisad, Serbia

Conclusion: The **free energy** of the machine based on oscillation pendulum-lever system, **is defined in this study, as a difference between the resulting energy of the machine and the energy input from the environment** in the same time interval. **Existence of the free energy** defined in this way **is not in accordance with the energy conservation law, but it has been verified experimentally and it can be explained.** ...Machines based on the operation of the **two-stage oscillators can have efficiency coefficients significantly higher than one.**

[http://www.veljkomilkovic.com/Images/Mathematical analisys Tosic english.pdf](http://www.veljkomilkovic.com/Images/Mathematical%20analysis%20Tosic%20english.pdf)
Mathematics of "Oscillation of the lever under the influence of the swinging of the pendulum"

[http://www.pendulum-lever.com/docs/Ljubo Panic On the track of the energy surplus.pdf](http://www.pendulum-lever.com/docs/Ljubo%20Panic%20On%20the%20track%20of%20the%20energy%20surplus.pdf)
ON THE TRACK OF THE ENERGY SURPLUS OF A TWO-STAGE MECHANICAL OSCILLATOR BY VELJKO MILKOVIĆ by Ljubo Panić advance university student of astrophysics
...It is important to emphasize that one of the characteristics of a two-stage mechanical oscillator of Veljko Milković is that a **direct coupling of the oscillations of the pendulum and of the lever doesn't exist**. They have different oscillation periods i.e. during one oscillation of the pendulum the lever performs two full oscillations! ...
Conclusion:.. The conclusion is that the **efficiency of a two-stage mechanical oscillator** by Veljko Milković **is always bigger than 1** because $\cos\varphi$ is always less than 1!

[http://www.pendulum-lever.com/docs/Jovan Bebic Analysis of influence of centrifugal force.pdf](http://www.pendulum-lever.com/docs/Jovan%20Bebic%20Analysis%20of%20influence%20of%20centrifugal%20force.pdf)
ANALYSIS OF THE INFLUENCE OF THE CENTRIFUGAL FORCE DURING OPERATION OF THE TWO-STAGE MECHANICAL OSCILLATOR BY VELJKO MILKOVIĆ by Jovan Bebić

<http://www.borderlands.de/Links/Double-Pendulum-Power-AC-Power-from-a-Mechanical-Oscillator.pdf>

Double Pendulum Power Method for Extracting Power from a Mechanical Oscillator -

A Numerical Analysis using the Runge Kutta Method to Solve the Euler Lagrange Equation for a Double Pendulum with Mechanical Load Anon Ymous, M.Sc. M.E, 2013-12-28

...We've been examining a pendulum with our numerical model with the following input parameters related to gure 1: $m_1 = 50\text{kg}$, $m_2 = 10\text{kg}$, $l_1 = 0.5\text{m}$, $l_2 = 0.3\text{m}$, $\theta_2 = 2\text{rad}$

...The result is that by adding 8.5 W of input power we continuously generate about 60 W of output power. **This equals a COP of about 7.** (page 15)

The author calculates also a **continously rotating system (COP = infinite)** with unbalanced cogwheels on a central wheel for power generating. The parameters of such a household generator are two 0.1 kg pendulums with a radius of 0.1 m, mounted on a frame with the radius 0.2 m. The pendulums are set in initial rotation at 50Hz. If the weight of the cogwheels and levers are assumed to be positioned at the cogwheel/pendulum center and is 1 kg per pendulum, **the output will be approximately 7.2 kW of AC power**. The output power distribution is reactive and resistive with a 10 ohm load.

Here are practical measurements of the Milkovi pendulum reported:

[http://www.veljkomilkovic.com/Images/Analysis Jovan Bebic 2-measuring.pdf](http://www.veljkomilkovic.com/Images/Analysis%20Jovan%20Bebic%202-measuring.pdf)

MEASURING THE RATIO OF OUTPUT AND INPUT ENERGY OF THE TWO-STAGE MECHANICAL OSCILLATOR BY VELJKO MILKOVIĆ by Jovan Bebić

This analysis measures output and input energy during operation of the two-stage oscillator by Veljko Milković (www.veljkomilkovic.com). Output energy was measured based on the elevation of the weight at the right arm of the lever of the two-stage mechanical oscillator, whereas input energy was measured based on the height of the initial position of the pendulum when it was out of balance.

... **The ratio of energy at the output and energy at the input is 22.89**, see:

$$\eta = \frac{A_{out}}{A_{in}} = \frac{18.02}{0.787} = 22.89$$

Conclusion: Based on the results of measurements and observations during this experiment and ten years of insight into the results of experiment involving the twostage oscillator by Veljko Milković, I can absolutely confirm that this is the biggest invention in the history of science! Novi Sad, Nov. 19, 2007

Further Milkovic links

http://www.dspe.nl/cms_file.php?fromDB=238

<https://www.youtube.com/watch?v=v8r63Ubpcf8> Here is a COP of 12:1 mentioned at the time slot 1:50

Patents :

https://worldwide.espacenet.com/searchResults?submitted=true&locale=en_EP&DB=EPODOC&ST=advanced&TI=&AB=&PN=&AP=&PR=&PD=&PA=&IN=veljko+milkovic&CPC=&IC=&Submit=Search