

March 13th (Fri), 2026

CLAVIS

POINT OF VIEW (“POV”) Vol.18

Tel: +8150 (5578) 3660
Email: info@clavisenergy.com
Website: www.clavisenergy.com/home

“Don’t Stop Believin”;

Why Energy Storage Becomes the Defining Force in The New Joule Order

Reflecting on Mr. Jeff Currie’s “A Crude Awakening”

Summary

Mr. Jeff Currie’s “The New Joule Order” reframes global energy priorities through a clear hierarchy: **security first, then affordability, and finally sustainability**. This reordered structure reflects the physical and geopolitical realities shaping today’s energy systems. And critically, it leads to the same structural conclusion everywhere: **more electrification, more localization, and more diversification in energy production**.

Electrification is the only domain where these three elements can be achieved simultaneously. Yet its success depends on the presence of robust and diverse **Energy Storage** solutions capable of absorbing renewable variability and supporting system stability. Battery, pumped hydro, hydrogen, and compressed air energy storage or CAES each play distinct and complementary roles. Among them, CAES emerges as a natural fit in applications requiring long duration, safety, and independence.

Energy Transition is irreversible. The challenge is not whether the world will move forward, but how we choose to shape that future.

Don’t Stop Believin’.

Disclaimer: The views expressed in this column are solely those of the author, based on personal experience and professional observations in the energy industry. They do not represent the views of any organization with which the author has been affiliated.

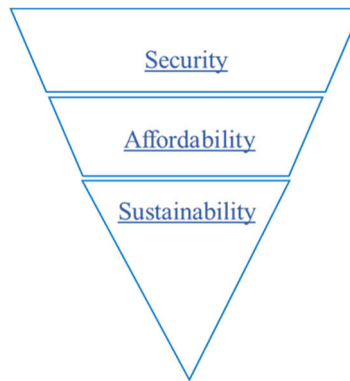
1. The New Joule Order: A New Global Gravity

- The recent report “A crude awakening” by Mr. Jeff Currie at CARLYLE, The New Joule Order begins by reordering the hierarchy of energy needs: security → affordability → sustainability.

Source: <https://www.carlyle.com/global-insights/white-paper/a-crude-awakening-pdf>

- As Maslow’s original insight suggests, the sequence matters — higher needs cannot be optimized until the foundation is secure. This hierarchy reflects the physical and geopolitical realities that now define

global energy systems.

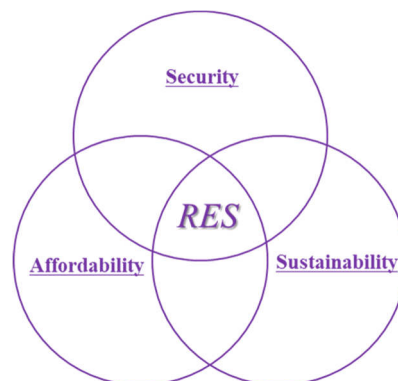


THE NEW JOULE ORDER

- And critically, this new order points toward the same structural response across regions and technologies: more electrification, more localization, and more diversification in energy production. These three forces form the core of the New Joule Order and define the direction in which energy systems must evolve.
- For CLAVIS ENERGY PARTNERS, this is not a new observation. It aligns with what we have consistently articulated in our previous POINT OF VIEW (POV) series: the intersection of these three forces is where the future of energy is being shaped.

2. Electrification: Where the Three Forces Converge

- The hierarchy of the New Joule Order is not merely a policy framework; it is a structural reality shaped by physics, economics, and geopolitics. And the only domain where security, affordability, and sustainability can be achieved simultaneously is Electrification.
- Electrification enhances controllability on the demand side, reduces vulnerability on the supply side, and increases transparency across the entire system. Renewable energy sources (RES) sit at the intersection of these three elements, and their value grows as Electrification progresses.



CLAVIS ENERGY's view on
"Electrification" under
energy transition era

- Electrification also naturally drives localization and diversification: distributed generation tailored to local needs, greater resilience during disruptions, and reduced dependence on single-fuel systems.
- These outcomes align precisely with Mr. Currie’s structural conclusion: more electrification, more localization, and more diversification in energy production.
- We place Electrification at the center of Energy Transition for this reason. This is consistent with what we have repeatedly stated in our POV series. It is not a matter of ideology, but of structure: Electrification is the only point where the three elements of the New Joule Order converge.
- And to make this convergence real, Energy Storage becomes indispensable.

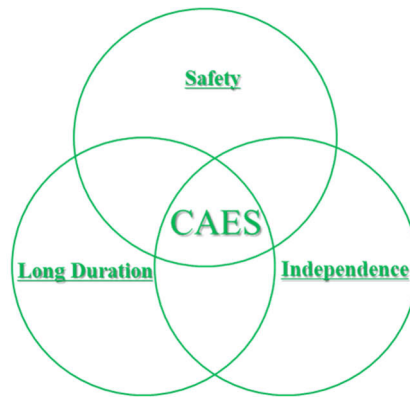
3. Energy Storage: The Foundation That Makes Electrification Work

- Even if Electrification is the structural intersection of the New Joule Order, its potential cannot be realized without Energy Storage.
- RES inherently carry variability. Without mechanisms to absorb fluctuations and bridge temporal gaps between supply and demand, Electrification remains a theoretical optimum rather than a practical solution.
- Battery, pumped hydro, hydrogen, and CAES are not competitors. They are complementary tools, each suited to different time scales, applications, and regional conditions. Batteries excel in short-duration balancing, pumped hydro in large-scale and long-duration shifts, hydrogen in seasonal storage, and CAES in applications requiring long duration, safety, and independence.
- As Energy Transition progresses, systems will remain in a prolonged mid-transition state: declining dispatchable fossil capacity, increasing renewable variability, and rapidly rising demand from Electrification. This is the period when systems are most fragile — and when Storage becomes most essential.
- We believe that enabling Electrification requires not only more storage capacity, but a diverse portfolio of storage technologies deployed in the right places.
- Among these, CAES emerges as a natural fit in specific contexts, as discussed in the next chapter.

4. CAES: A Natural Consequence, Not the Only Answer Though

- The role of each storage technology is determined not by ideology, but by physics, safety, operational characteristics, and local conditions.
- We do not position CAES as the single solution. Rather, we see it as one of several essential tools; and in certain domains, a natural consequence of system needs.
- CAES offers three defining characteristics:
 - ✓ **Safety — no chemical reactions, stable under extreme conditions**
 - ✓ **Long Duration — capable of multi-hour to multi-day or extended duration discharge**
 - ✓ **Independence — minimal reliance on complex supply chains or fuels**

✓ **No fuel — all you need is air, available wherever and whenever**



One of the convincing
potential solutions as a
“Natural Consequence”

- These attributes align closely with emerging needs in a highly electrified world: distributed, resilient, and grid-independent demand. In disaster-prone regions or mission-critical applications such as data centers, CAES provides value that other storage technologies cannot easily replicate.
- CAES does not compete with batteries, pumped hydro, or hydrogen. It complements them. It is one of several structural responses to the demands of Electrification; and in specific contexts, it becomes the natural choice.

Conclusion

The New Joule Order makes one thing clear: Energy Transition is irreversible.

Security forms the foundation, affordability builds upon it, and sustainability completes the structure.

This hierarchy leads inevitably toward more electrification, more localization, and more diversification in energy production.

Electrification is the only domain where these three elements converge.

Energy Storage is the foundation that makes this convergence possible.

And CAES, alongside other storage technologies, plays a vital role in shaping a resilient, electrified future.

The direction is set.

The question is how we choose to shape the journey.

Believing in the future — and acting accordingly — is the only path forward.

Don't Stop Believin'

CLAVIS ENERGY PARTNERS LLC