PUT THE CAP ON IT

How Energy Conservation unlocks the power of change

Capgemini invent

Fuel to the fire

The Energy price shocks of the past two years remain with us. Wholesale prices are still around four times higher than they were in winter 2019-20. The immediate threat of blackouts appears to have passed, through rapid mobilization of gas storage and a fortunately warm winter. However, the structural issues that led to the energy crisis remain. And with government protection schemes being unwound in early 2023, now is the time for organizations to act.

Stakeholders now expect action from organizations. Customers expect businesses to be resilient and will quickly switch if operations are interrupted. Shareholders will expect a robust plan that protects their investment. Society needs organizations to participate in building a more sovereign energy system.

Directing energy where it matters most

The leaders of energy resilient organizations will address energy as a board and executive issue. They will have a deep understanding of where their energy comes from, how it flows through their organization, and what structural changes should be considered. It is time for senior accountability for energy to be clarified and the traditional split ownership across operations and procurement to be harmonized.

Optimizing Energy for Longevity

Energy Source **Energy Flow** **Energy Infrastructure**

Harnessing Energy Conservation

This enables new thinking about how partnerships and ecosystems can be formed. Employees are critical to this implementation, committed people will drive the pace of change and the adoption of new solutions, this will start with simple changes like turning off lights, but will quickly develop into employee led transformations.

Made to measure

Developing the capability for visibility and control of energy is an essential early step. The use of energy in every building, piece of equipment, and process should be tracked. Operational decision making will be informed by this information, and more sophisticated approaches will be developed to manage energy use. Our own experience shows that savings of above 25% are achievable.

Three keys to resilience

Relationships

How to create strong relationships with energy producers, networks, and suppliers, through mechanisms such as Power Purchase Agreements.

On-site solutions

Who to work with on development of your own solar, wind, and battery resources.

Flexibility

How to adapt and create value through more flexible use of energy, for example through participation in a demand response sceme.

The Life Sciences Industry: Re-imagining the Future

The energy crisis impact in Life Sciences: what does it mean for Pharma?

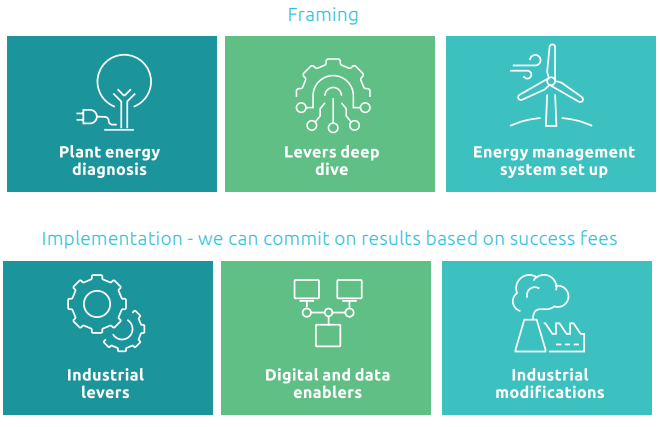
As winter brings an energy price storm, pharmaceutical companies face a significant challenge due to their reliability on manufacturing-intensive operations across the value chain. Most pharmaceutical companies will face increasing pressures on margins due to the spike in energy costs. Reports from the industry indicate that energy prices for drug manufacturers have risen 10-fold in Europe, with costs for raw materials spiking from 50% to even 160%.

Manufacturing for pharmaceutical products is highly energy-intense due to fermentation processes, low or high temperatures and sterility processes. Multiple surveys indicate that some 80% of pharmaceutical companies have already made significant changes to their production models to bear the high energy bills.

Therefore, the energy crisis will have a direct impact on drug pricing, which will become a key topic for regulators as calls for the discontinuation of generics may rise, resulting in higher costs for patients and customers. Energy prices and their impact on production costs will then be key for access to medicines, a highly regarded topic.

Achieving energy resiliency for Pharmaceuticals

In the short-run, pharmaceuticals will need to urgently address the production costs across the manufacturing value chain through smart energy transition methods. Accordingly, reducing energy costs for industrial sites is critical. Our solution framework on energy efficiency is tailored to optimize energy usage across all processes. We work with a pragmatic resource efficiency value proposition, leveraging our assets for an end-to-end energy transformation.



How do we approach energy optimization? We perform an energy diagnosis that analyzes the as-is manufacturing site's energy consumption and its assets. We further carry a deep dive on all levers of sustainability and energy efficiency at the site and set up an energy management system. In the second phase, implementation of industrial levers is analyzed (process and control optimization, equipment monitoring, production optimizers, waste management, etc.). Furthermore, we implement digital and data enablers, from digital strategy, IoT connectivity, smart metering, data platforms, etc.
Industrial modifications target equipment and process innovation for energy transition.

Into a sustainable future: embracing energy transitions with net-zero

In the mid-term, pharmaceuticals that embrace sustainable and greener methods towards net-zero will be best positioned to weather the impacts of energy crises, achieving innovative and intelligent methods to lower their energy costs. Additionally, they will be regulation-ready, mostly in Europe, and best off with regards to margin preservation.

Our framework deep dives on sustainable operations, leveraging supply-chain and operational processes to achieve net-zero via digital and data-driven solutions. We aim to support pharmaceuticals as they commit, act, and monitor.

Commit	Net-zero strategy and new business models: purpose, commitments, transformation path		
Act on 3 levers	Green experience: products and services	Sustainable IT: devices, apps & infrastructure	Sustainable operations: manufacturing & supply chain
Monitor & Report	Data for net-zero strategy (890 Platform): data platform, monitoring, and reporting		

Get in touch

Find out how you can build a more sustainable and future-proof organization with Energy Conservation.

For more information, contact invent@capgemini.com

And scan the QR code to visit the Energy Conservation webpage's informative resources.

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Ivania is both the Head of Life Sciences for Capgemini Invent Belgium and a Member of the Board. Her 20 plus years of strategy and transformation experience connecting the entire value chain of growth drivers with a far-reaching vision has enabled organizations to become compelling catalysts for innovation. Her experience in Life Science's dynamic ecosystem actively challenges organizations to bring new ideas to realization and create actionable results for a digital and sustainable future based on a people-centered platform.

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