

# PUT THE CAP ON IT

Capgemini  invent

## How Energy Conservation unlocks the power of change

### 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.

### 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.

### 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.

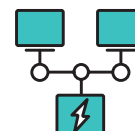
#### *Optimizing Energy for Longevity*



Energy Source



Energy Flow



Energy Infrastructure

### 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 scheme.

# Automotive Industry: Green Light For Growth

## Challenges: Impact of energy transition on the automotive industry

Besides existing challenges with subcontractor shortage, long production times, and inflation, the energy transition highly effects the entire value chain of automotive companies and their customers. Automotive companies have to deal with high energy market volatility and significantly rising electricity and gas prices, which increase productions costs. As consequence, increased vehicle prices in combination with higher running costs could slow down electrification. Lastly, unprecedented concerns about energy supply and energy restrictions create further risk for car manufacturers. Therefore, an efficient usage of energy along with the switch to clean and reliable energy supplies is more pressing than ever.

## Solutions: Three pillars for a holistic and sustainable transformation

Energy efficiency for automotive companies requires collaboration within the industrial ecosystem, from suppliers and distributors to recyclers and energy producers. In our solution framework, we have identified three pillars to tackle the challenges and enable holistic and sustainable transformation: energy consumption, production as well as strategy, and sourcing.

Firstly, energy consumption aims to reduce emissions and energy utilization by monitoring and controlling facilities, reevaluating suppliers, reengineering components, developing sustainable business models, and creating digital twins.

### Building resilience



Reducing energy consumption



Optimizing energy production and storage



Ensuring clean energy sourcing

Secondly, energy production and storage focus on optimizing energy usage by producing renewable energy, facilitating virtual power plants, storing energy with large-scale batteries, and developing charging infrastructure and platform solutions combined with bi-directional charging.

Thirdly, energy sourcing pursues efficient and sustainable procurement of energy by building long-term power purchase agreements, optimizing the energy portfolio, facilitating green energy sourcing, and filling renewable energy gaps with alternatives.

## Roadmap: Your route to an energy efficiency future

Several key elements facilitate the route to the successful long-term energy-efficient transformation of automotive companies. Firstly, it is important to get the company commitment and align energy targets with strategy. Secondly, building blocks must be set and an energy transition roadmap with clear actions derived. Afterwards, the implementation needs to be ensured and value realization has to be monitored. Lastly, the achievements should be communicated to key stakeholders. Along the journey, Capgemini will support with best practice examples and individual energy transition frameworks.

## 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](mailto:invent@capgemini.com)

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

