

How small firms can deal with the Iran energy price shock

With no price cap for companies, firms are scrambling to avoid rising energy prices after the US struck Iran. What can be done to cushion the blow?

[Jill Treanor](#), City Editor, [Olivia Surguy](#) and [Hannah Prevett](#), Associate Business Editor

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Rebecca James could not believe her luck. She fixed the energy bill for the business she runs making metal parts for warships and submarines just three weeks before America's attacks on Iran ignited the price of oil and gas.

Oil prices jumped 20 per cent and gas prices doubled after President Trump unleashed [his Operation Epic Fury](#) attack on the oil-rich nation a week ago.

Cofast, which has operations in Plymouth and the West Midlands, is now paying £8,000 a month for electricity for the next two years, down from the £13,000 it was paying.

But, James, 38, is still worrying. While the bill is down, it is still double the £4,000 Cofast paid before [Russia invaded Ukraine](#) four years ago, causing an energy price shock. Rebecca James's company developed energy-efficient processes after the invasion of Ukraine

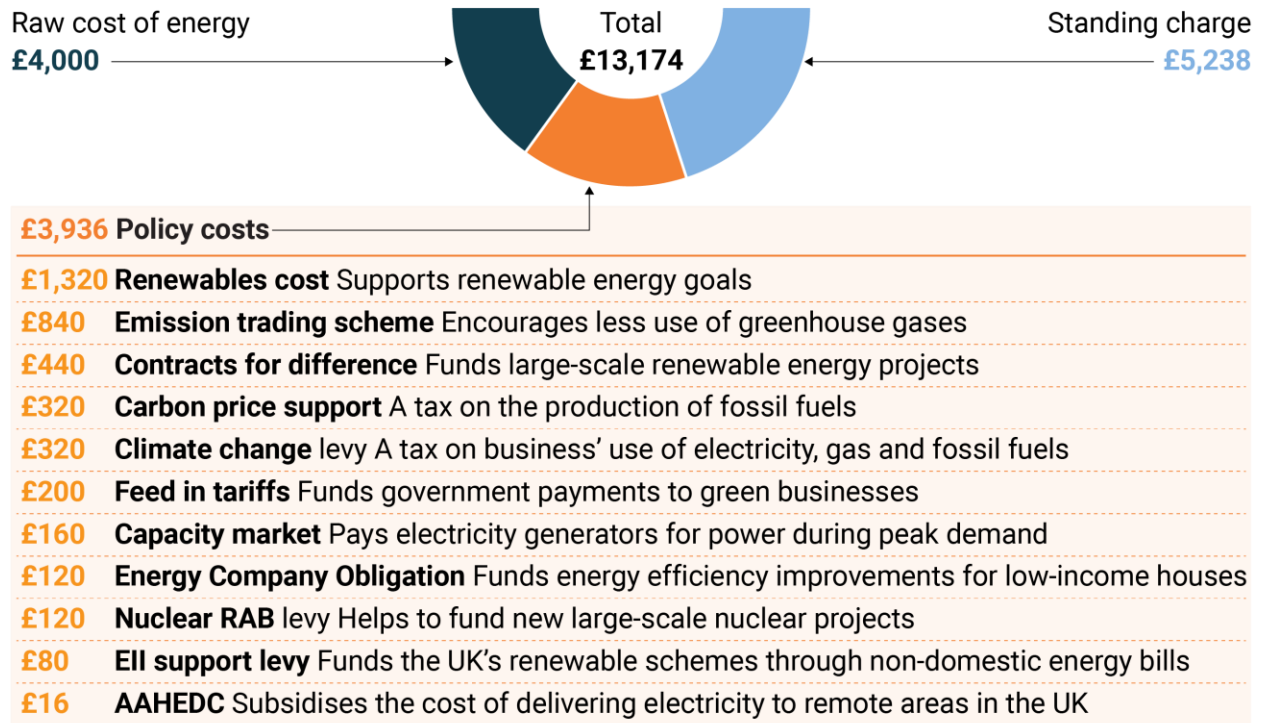
That prompted Cofast to invest £48,000 in more energy-efficient processes to cut reliance on the subcontractors who imposed punitive energy surcharges on it after the Russian invasion. But along with higher prices, these helped tip the business into administration last month. It was rescued, preserving all 53 jobs.

"We are much better protected now than we were previously," said James, "but we're nervous about seeing some of the increases and surcharges being placed on us from subcontractors."

Cofast was just one of the thousands of businesses scrambling last week to assess the implications of [the Iran attacks](#) on their cost of doing business. Unlike households, there is no price cap for businesses to insulate them from the worst of the price hikes.

The cost of energy

Components in an annual energy bill based on a business such as a hair salon, gym or small restaurant consuming 40,000kWh



Graphic by The Times and The Sunday Times. Source: FSB

MakeUK, the manufacturers' lobby group, had already sounded the alarm about Britain's perilously [high electricity costs](#), which are four times higher than in America and 46 per cent above the global average. Now, with fears that an escalation in the conflict will have a lasting impact on energy prices, Tina McKenzie, policy chair of the Federation of Small Businesses, warned it was not just manufacturers but also a swathe of small firms who were "facing a dangerous moment".

So how are businesses being affected by the turbulence triggered by [the Iranian conflict](#) — and what can be done to cushion any blow?

Rush to fix?

Liam Conway, who runs the broker Greenfields Energy Group, gave a painful example of one client who had had prevaricated about signing a new contract before [the Iran attacks](#). The client's annual electricity bill was usually £10 million. "On Monday it had gone up by £1.8 million," said Conway.

He warned clients “it’s pretty crazy out there” in the markets but urged them not to make rash decisions: “Unless you need to buy energy now, the best thing is to sit on your hands.”

Why? While [the price of gas and oil](#) to buy immediately — at so-called spot prices — rocketed, the prices to buy up to three years in the future were less turbulent.

Smoke rises after a strike in Doha, Qatar. The gas-rich nation is struggling to ship its exports through the Strait of Hormuz Mohammed Salem/Reuters

This illustrates the complexity of the way businesses buy their electricity. While some buy energy in the “spot” market, many lock in their prices for an average of two years, or reach agreements with suppliers where they use a certain amount of energy each month.

Rob Fello, chief executive of the British Ceramics Confederation, said: “Unless your contract is due for replacing now, you’re not immediately going to get hit by it. You’re going to get hit whenever the contract is next up for renewal if the price hasn’t come down.”

Some companies generate their own power, such as Naylor Industries in Wombwell, near Barnsley, South Yorkshire, which has its own combined heat and power (CHP) plant. It makes plastic pipes for the construction industry but even it was not fully protected from the higher prices. Edward Naylor, 62, executive chairman, said the company had bought three quarters of the gas it needed at pre-arranged prices, leaving it exposed to the vagaries of spot prices for the rest.

“We’ve ‘bought forward’ until October. So, in the very short term we’re covered, but if turbulence continues, then obviously we’d be very concerned that we’d have a significant increase in our cost base come October,” said Naylor, the fourth generation of his family to run the business.

Harris and Bailey, a wholesale builders’ merchant in Croydon, south London, has installed solar panels and produces more energy than it uses, but even so, finance director Jonathan Southgate, 54, said: “There is a concern for our customers. Sales are really hard in this business at the moment. Everyone’s getting hammered.”

Edward Naylor’s family business generates its own power but it is still not fully protected. Naylor Industries

Price rises ahead

Businesses tend to watch the price of gas as it determines the price of electricity — and it jumped more quickly than the oil price after gas-rich Qatar was unable to ship its exports [through the Strait of Hormuz](#) in the Gulf waters near Iran.

While the price of gas reached 134p a therm, it was not at the stratospheric levels of more than 600p a therm it reached after the Ukraine invasion.

- [Juliet Samuel: Another gas shock and Europe's still not ready](#)

Much will depend on how long the situation lasts. [Somayeh Taheri](#), founder of Manchester-based renewable energy marketplace UrbanChain, said: “Nobody believes this is going to end quickly, but businesses are in shock. They don’t know what to do — so they do nothing.”

She is a British-based Iranian whose parents live in Shiraz, in the south of the country, and said it was frightening speaking to them. “When I was talking to my mum I could hear missiles,” she said.

Somayeh Taheri fears for her parents in Iran
Jon Super FOR THE SUNDAY TIMES

Until last week, many analysts had expected energy prices to remain stable this year, with oil at about \$65 a barrel. Holger Schmieding, chief economist at Berenberg bank, was among those reconsidering his assumptions. In his “base case” scenario, the strait reopens at the end of the month, allowing prices to fall back. If the conflict continues, then the oil price could jump to \$120 a barrel.

Calls for help

Businesses already have some support from the government. In the wake of the Ukraine invasion, the Conservatives cut the bills for about 500 high-intensity users — the likes of the steel, cement and glass industry — through [the “Supercharger” scheme](#).

This exempted them from some of the levies included in energy bills for initiatives such as [net zero](#). But it also imposed new charges on businesses with lower energy needs, creating tension between smaller and larger firms.

Advertisement

After intense lobbying from the business community, the Labour government announced in November that it would launch a “business industrial competitiveness scheme”, known as Bics, to cut the energy bills of an estimated 7,000 businesses by 25 per cent by April 2027.

Again, the aim was to reduce some of the levies on their bills. A consultation has closed but no details have yet been published.

MakeUK is calling for the scope to be widened to 130,000 businesses and for it be introduced next month, rather than waiting another year.

“We’ve been pushing the government because we think it’s viable to come into place [this] April. It is late and it definitely puts some of our members at risk,” said Patrick Matthewson,

energy policy manager at MakeUK. The potteries and manufacturers of Stoke-on-Trent can't turn the heat down on their kilns to save energy — so will have to pay higher prices. OLI SCARFF/AFP/GETTY IMAGES

Research by the Federation of Small Businesses illustrates just how complicated the structure of bills is, with nine different levies making up almost a third of the cost of a small business. These range from paying for the Supercharger support to the emission trading scheme, which forces companies to buy allowances for their emissions.

A government spokesperson said: "We know the cost of energy is one of the greatest challenges facing industry ... we'll shortly publish details of how we will reduce energy bills by up to 25 per cent for over 7,000 businesses."

- [What the Iran war means for petrol prices, savings and mortgages](#)

Business leaders point out that households, which are regulated by Ofgem, [are protected by a cap](#). Tim Evans, 58, sales director at Mantec Technical Ceramics, said he could not turn down the heat on his kilns in his Stoke-on-Trent factory to cut his costs as homeowners might choose to do. "As they've done in the domestic sector they should put energy caps in place and they should make that available to businesses of all sizes," he said.

His fear is that he will have to pass on costs to customers. "We may lose business. We may lose to overseas competitors who are not subject to the same cost," said Evans.

Inflation risk

Economists are already warning that higher energy prices will scupper [Rachel Reeves's efforts to bring down inflation](#), which in turn will make it harder for the Bank of England to bring down interest rates from 3.75 per cent. Market traders downgraded the chances of the Bank cutting rates twice this year.

Sanjay Raja, economist at Deutsche Bank, said that if the energy price rises persist, "the once foregone conclusion that the UK would see the largest disinflation among the G7 could come to an abrupt halt".

He calculated that half of the basket of goods used to measure inflation were sensitive to energy prices, such as travel fares, restaurants and accommodation costs all being hit.

Back at Cofast's manufacturing base in Willenhall, near Walsall, James was braced for higher costs to run the business — but also eyeing opportunities. "It's interesting to see news about what's going on in the Middle East," she said, "knowing that spend with us will probably increase but our costs will almost certainly increase."

Πώς μπορούν οι μικρές επιχειρήσεις να αντιμετωπίσουν το ενεργειακό σοκ από την κρίση στο Ιράν

[μετάφραση στα ΕΛΛΗΝΙΚΑ του ως άνω άρθρου]

Με την απουσία ανώτατου ορίου τιμών για τις επιχειρήσεις, πολλές εταιρείες προσπαθούν να περιορίσουν τον αντίκτυπο των αυξήσεων στις τιμές ενέργειας μετά τις στρατιωτικές επιθέσεις των ΗΠΑ στο Ιράν. Ποιες στρατηγικές μπορούν να μετριάσουν το πλήγμα;

Πρόσφατα γεγονότα στη Μέση Ανατολή προκάλεσαν έντονη αναστάτωση στις αγορές ενέργειας. Μετά τις επιθέσεις των Ηνωμένων Πολιτειών στο Ιράν, οι τιμές του πετρελαίου αυξήθηκαν κατά περίπου 20%, ενώ οι τιμές του φυσικού αερίου σχεδόν διπλασιάστηκαν. Αυτή η εξέλιξη δημιούργησε νέες πιέσεις στο κόστος λειτουργίας πολλών επιχειρήσεων.

Ένα χαρακτηριστικό παράδειγμα αποτελεί η εταιρεία Cofast, η οποία κατασκευάζει μεταλλικά εξαρτήματα για πολεμικά πλοία και υποβρύχια. Η διευθύντρια της εταιρείας, Rebecca James, είχε «κλειδώσει» την τιμή ηλεκτρικής ενέργειας για τα επόμενα δύο χρόνια μόλις τρεις εβδομάδες πριν από την έναρξη των επιθέσεων. Έτσι, η εταιρεία πληρώνει περίπου 8.000 λίρες τον μήνα για ηλεκτρική ενέργεια, αντί για 13.000 που πλήρωνε προηγουμένως.

Ωστόσο, ακόμη και αυτό το κόστος παραμένει διπλάσιο από το επίπεδο των 4.000 λιρών που πλήρωνε η εταιρεία πριν από την εισβολή της Ρωσίας στην Ουκρανία πριν από τέσσερα χρόνια, γεγονός που είχε ήδη προκαλέσει σημαντικό ενεργειακό σοκ στις αγορές.

Μετά την κρίση εκείνης της περιόδου, η εταιρεία επένδυσε περίπου 48.000 λίρες σε ενεργειακά αποδοτικότερες διαδικασίες παραγωγής, προκειμένου να μειώσει την εξάρτησή της από υπερβολάβους που επέβαλαν υψηλές ενεργειακές προσαυξήσεις. Παρά τις προσπάθειες αυτές, οι αυξήσεις στο ενεργειακό κόστος συνέβαλαν ώστε η επιχείρηση να βρεθεί σε οικονομικές δυσκολίες και να τεθεί προσωρινά σε καθεστώς διαχείρισης τον προηγούμενο μήνα, πριν τελικά διασωθεί, διατηρώντας και τις 53 θέσεις εργασίας.

Η ίδια δηλώνει ότι η επιχείρηση είναι σήμερα καλύτερα προετοιμασμένη σε σχέση με το παρελθόν, αλλά εξακολουθεί να ανησυχεί για τις αυξήσεις τιμών που μετακυλίνουν από τους προμηθευτές και τους υπερβολάβους.

Η Cofast αποτελεί μόνο ένα παράδειγμα από τις χιλιάδες επιχειρήσεις που προσπαθούν να εκτιμήσουν τον αντίκτυπο της κρίσης στο Ιράν στο λειτουργικό τους κόστος. Σε αντίθεση με τα νοικοκυριά, τα οποία προστατεύονται από ανώτατα όρια τιμών στην ενέργεια, οι επιχειρήσεις δεν διαθέτουν αντίστοιχους μηχανισμούς προστασίας.

Η πολυπλοκότητα της αγοράς ενέργειας

Η αγορά ενέργειας λειτουργεί με διαφορετικούς μηχανισμούς τιμολόγησης.

Ορισμένες επιχειρήσεις αγοράζουν ενέργεια στις λεγόμενες **αγορές άμεσης παράδοσης (spot markets)**, όπου οι τιμές αντανακλούν τις τρέχουσες συνθήκες προσφοράς και ζήτησης. Άλλες επιχειρήσεις προτιμούν να **κλειδώνουν τις τιμές τους μέσω μακροχρόνιων συμβολαίων**, συνήθως διάρκειας δύο ή τριών ετών, ώστε να μειώσουν την αβεβαιότητα.

Για παράδειγμα, ένας πελάτης με ετήσιο λογαριασμό ηλεκτρικής ενέργειας περίπου 10 εκατομμυρίων λιρών είδε το κόστος του να αυξάνεται κατά 1,8 εκατομμύρια λίρες μέσα σε μία ημέρα μετά την κλιμάκωση της κρίσης.

Οι επιχειρήσεις που έχουν ήδη κλειδώσει τις τιμές τους δεν επηρεάζονται άμεσα. Όμως, όταν λήξει το συμβόλαιό τους και χρειαστεί να ανανεωθεί, θα βρεθούν αντιμέτωπες με τις νέες υψηλότερες τιμές.

Στρατηγικές προσαρμογής των επιχειρήσεων

Ορισμένες επιχειρήσεις προσπαθούν να μειώσουν την έκθεσή τους στις ενεργειακές διακυμάνσεις μέσω **παραγωγής δικής τους ενέργειας**.

Για παράδειγμα, η εταιρεία Naylor Industries, που κατασκευάζει πλαστικούς σωλήνες για την οικοδομική βιομηχανία, διαθέτει δική της μονάδα παραγωγής ηλεκτρικής ενέργειας και θερμότητας. Παρόλα αυτά, δεν είναι πλήρως προστατευμένη από τις διακυμάνσεις των τιμών, καθώς μέρος του φυσικού αερίου που χρησιμοποιεί αγοράζεται στις τρέχουσες τιμές της αγοράς.

Άλλες επιχειρήσεις έχουν επενδύσει σε **ηλιακή ενέργεια** ή άλλες μορφές ανανεώσιμων πηγών. Ωστόσο, ακόμη και σε αυτές τις περιπτώσεις υπάρχει ανησυχία για την επίδραση των αυξημένων ενεργειακών τιμών στους πελάτες τους και συνεπώς στη συνολική ζήτηση.

Μακροοικονομικές επιπτώσεις

Οι οικονομολόγοι προειδοποιούν ότι η άνοδος των ενεργειακών τιμών μπορεί να ανακόψει την πτώση του πληθωρισμού.

Πολλά από τα αγαθά και τις υπηρεσίες που περιλαμβάνονται στον δείκτη τιμών καταναλωτή επηρεάζονται άμεσα ή έμμεσα από το ενεργειακό κόστος. Μεταφορές, εστίαση, τουρισμός και διαμονή αποτελούν χαρακτηριστικά παραδείγματα.

Εάν οι υψηλές τιμές ενέργειας διατηρηθούν για μεγάλο χρονικό διάστημα, οι κεντρικές τράπεζες ενδέχεται να δυσκολευτούν να μειώσουν τα επιτόκια, καθώς ο πληθωρισμός θα παραμείνει υψηλός.

Δημόσιες πολιτικές και κρατική παρέμβαση

Ορισμένοι κλάδοι υψηλής ενεργειακής έντασης, όπως η χαλυβουργία, η τσιμεντοβιομηχανία και η παραγωγή γυαλιού, λαμβάνουν ήδη κρατική στήριξη μέσω ειδικών προγραμμάτων μείωσης ενεργειακού κόστους.

Ωστόσο, πολλοί επιχειρηματικοί φορείς ζητούν την επέκταση αυτών των μέτρων και σε μικρότερες επιχειρήσεις, καθώς η ενεργειακή κρίση επηρεάζει πλέον ένα πολύ ευρύτερο τμήμα της οικονομίας.

Κεντρικό Δίδαγμα για τη Διοικητική Οικονομική

Η περίπτωση αυτή αποτελεί χαρακτηριστικό παράδειγμα για τη διοικητική οικονομική, καθώς αναδεικνύει:

- τον ρόλο της **αβεβαιότητας στις τιμές των εισροών**
- τη σημασία των **μακροχρόνιων συμβολαίων για τη διαχείριση κινδύνου**
- τη στρατηγική σημασία των **επενδύσεων στην ενεργειακή αποδοτικότητα**
- τη μετακύλιση κόστους προς τις τιμές των προϊόντων
- την επίδραση των γεωπολιτικών κρίσεων στις αγορές ενέργειας.

Teaching case with structured discussion questions and an explanation of futures hedging using the example of Aegean Airlines

Managerial Economics Teaching Case.

Energy Price Shocks, Futures Contracts, and Corporate Resilience: The Case of Aegean Airlines

Background

Global geopolitical events often trigger sudden increases in energy prices. Military conflict, sanctions, or disruptions in oil and gas supply chains can produce rapid price volatility in international energy markets. For firms operating in energy-intensive industries—such as airlines, manufacturing, shipping, or logistics—these price fluctuations can dramatically affect operating costs.

Following recent geopolitical tensions in the Middle East, global oil and gas prices rose sharply. Many companies faced immediate cost pressures because energy is a major input in production and transportation. Firms without protection mechanisms must absorb higher costs or pass them on to consumers through higher prices.

Some companies, however, adopt **risk-management strategies** that protect them from sudden price increases. One of the most widely used strategies is **fuel hedging through futures contracts**.

The Case of Aegean Airlines

Aegean Airlines, Greece's largest airline, consistently hedges a significant portion of its annual fuel needs. In many years the company hedges **more than 60% of its expected fuel consumption**.

Jet fuel is one of the airline industry's largest cost components, often representing **25–35% of total operating costs**. A sudden increase in oil prices can therefore severely impact airline profitability.

To reduce this risk, Aegean enters into **futures contracts or similar derivative agreements** that allow it to purchase fuel at a predetermined price for delivery at a future date.

For example, suppose Aegean expects to consume **1 million barrels of jet fuel next year**. If the current market price is **\$80 per barrel**, the company may hedge 60% of this amount (600,000 barrels) through futures contracts at that price.

If geopolitical tensions later push oil prices to **\$110 per barrel**, Aegean still pays **\$80 for the hedged portion**. Only the unhedged portion of its fuel purchases is exposed to the higher market price.

What Is a Futures Contract?

A **futures contract** is a financial agreement to buy or sell a specific quantity of a commodity at a predetermined price on a specified future date.

Key characteristics:

- The price is fixed today
- The transaction occurs in the future
- The contract is standardized and traded in organized markets
- Both parties are obligated to execute the transaction

For companies, futures contracts function as **insurance against price volatility**.

How Hedging Protects Firms

Fuel hedging helps firms achieve several strategic objectives:

1. **Cost stability**
Firms can forecast future operating costs with greater accuracy.
2. **Protection from price spikes**
Sudden increases in oil or gas prices have a smaller impact.
3. **Financial planning**
Stable costs allow better budgeting and investment planning.
4. **Competitive advantage**
Firms with hedging strategies may maintain lower prices than competitors during price shocks.

How Costs Are Transferred to Consumers

Even when firms hedge energy costs, they rarely hedge 100% of their fuel consumption. Therefore:

- Part of the cost increase is absorbed by the firm
- Part may be transferred to consumers through higher prices (e.g., airline tickets)

The degree of cost pass-through depends on:

- market competition
- demand elasticity
- hedging coverage
- regulatory environment

Managerial Implications

Energy hedging is not only a financial technique but also a **strategic management decision**. Firms must decide:

- how much of their energy consumption to hedge
- when to hedge
- which financial instruments to use
- how to balance cost stability against potential missed opportunities if prices fall.

In volatile global energy markets, effective hedging strategies can significantly improve **corporate resilience and sustainability**.

Discussion Questions

1. Why are energy price shocks particularly dangerous for industries such as airlines, manufacturing, and shipping?
2. Explain how a futures contract works. How does it differ from buying energy on the spot market?
3. Why might a company hedge **60% of its fuel consumption rather than 100%**?
4. What risks remain even after a firm hedges part of its energy costs?
5. If oil prices fall instead of rising, how might hedging affect the company's competitiveness?
6. Under what conditions can companies transfer higher energy costs to consumers?
7. From a managerial perspective, should fuel hedging be considered:
 - a financial decision,
 - a strategic decision,
 - or both?

Explain your reasoning.

8. How does energy hedging contribute to **corporate resilience and long-term sustainability**?

simple board diagram:

Oil price today = \$80.

Scenario A (No hedging)

Price rises to \$110 → company pays \$110

Scenario B (60% hedged)

60% × \$80 = protected

40% × \$110 = exposed. Average cost lower

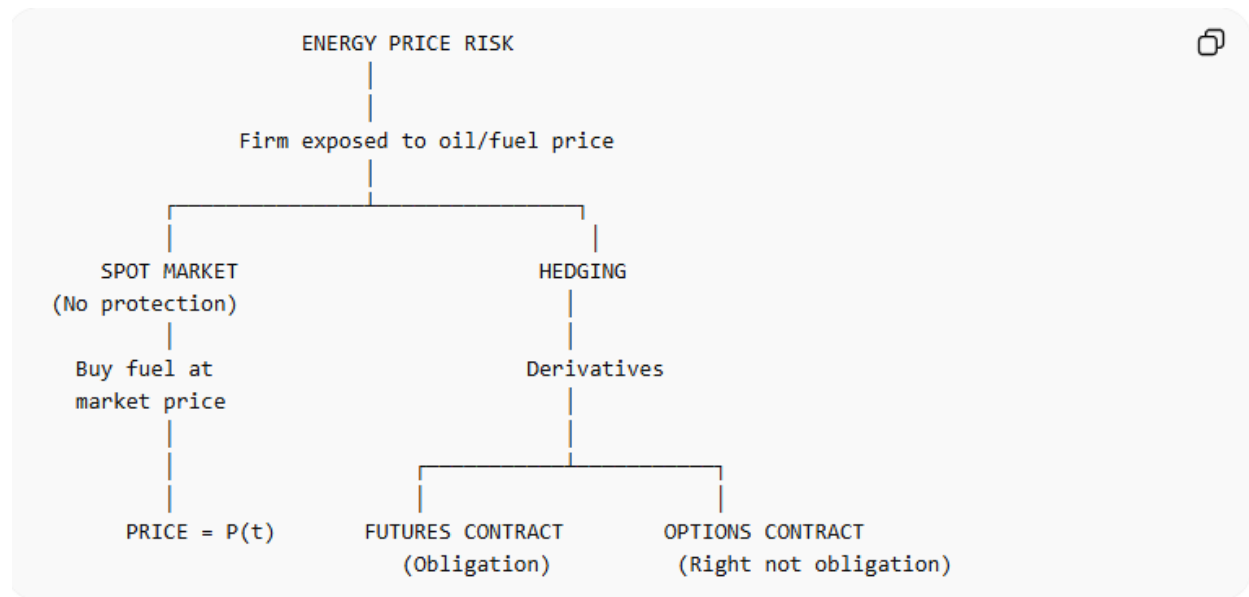
two different hedging instruments that students often confuse:

- 1 **Futures contract** → obligation to buy/sell at maturity
- 2 **Options contract** → right but **not obligation** (lose only the premium)

For teaching purposes it is very powerful to **show both in one visual architecture**, especially when explaining airline fuel hedging.

Below is a **clean visual diagram you can show in class**.

Energy Hedging Instruments in Managerial Economics



✦ Firm is fully exposed to volatility

2. Futures Contract (Price Lock Strategy)

Today: Firm signs Futures Contract

Buyer (Firm) agrees to buy fuel
Seller agrees to deliver fuel

Fixed price = \$80
Maturity = 12 months
Quantity = 1 million barrels

At maturity

Market price = \$110

Firm still pays \$80
Savings = \$30 per barrel

Market price = \$60

Firm still pays \$80
Firm loses opportunity to buy cheaper

✦ Key feature

Futures = OBLIGATION for both parties

Buyer = payee

Seller = receiver

No option to walk away.

3. Options Contract (Insurance Strategy)

This is the case you described:

Right but not obligation.

Example: **Call Option on Jet Fuel**

Strike price = \$80
Premium (ticket cost) = \$5 per barrel
Maturity = 12 months

Firm pays **premium today**.

Premium = insurance cost

Scenario A: Prices rise

Market price = \$110

Firm exercises option
Buys fuel at \$80

Total cost = \$80 + \$5 premium = \$85

Savings = \$25 per barrel

Scenario B: Prices fall

Market price = \$60

Firm **DOES NOT** exercise option
Buys fuel at market price = \$60

Loss:

Premium paid = \$5

✦ **Maximum loss = hedging cost (premium)**

Visual Comparison for Students

HEDGING STRATEGIES			
	SPOT	FUTURES	OPTIONS
Price certainty	✗	✓	✓
Obligation	✗	✓	✗
Right not obligation	✗	✗	✓
Upfront cost (premium)	✗	✗	✓
Max loss	Unlimited	Opportunity loss	Premium

Airline Example (Aegean Airlines)

Expected annual fuel demand
= 1,000,000 barrels

Hedging strategy

60% futures
20% options
20% spot

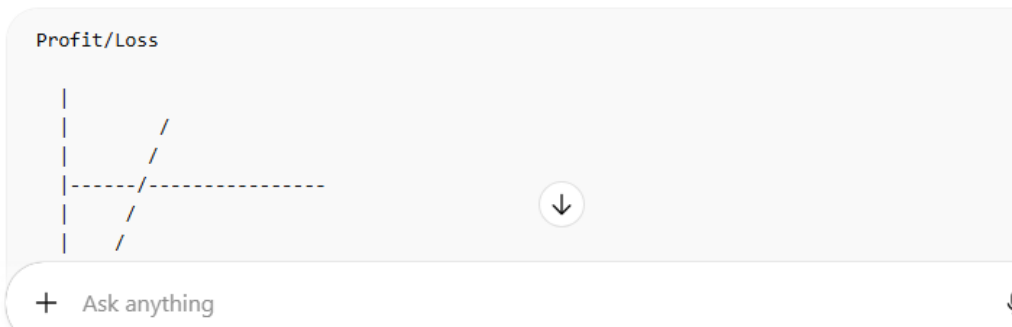
Result:

Price spike → company protected
Price drop → company partly benefits

This is why airlines use **portfolio hedging strategies**.

Simple Classroom Graph

Draw this on the board:



I. The Student's Question

Question: If airlines hedge **crude oil**, but airplanes use **jet fuel (kerosene)**, how does the airline actually obtain the fuel? Does the airline deliver crude oil to a refinery?

Short answer:

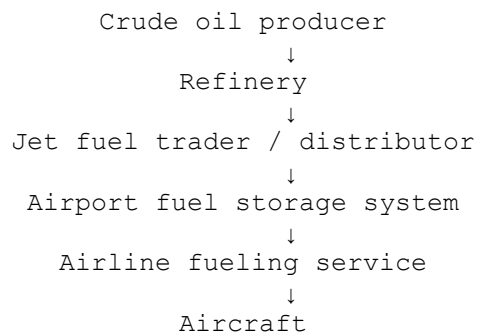
No. Airlines **do not buy crude oil and refine it themselves**. They buy **jet fuel from refineries or fuel suppliers**, while hedging is done using **financial contracts linked to crude oil or jet fuel benchmarks**.

1. The Physical Market (Real Fuel Supply)

Airlines buy **Jet A-1 fuel (aviation kerosene)** from:

- oil companies, • refineries, • airport fuel consortiums and • fuel traders

Example supply chain:



The airline simply **pays for jet fuel delivered at the airport**. It does **not send crude oil to the refinery**.

2. The Financial Market (Hedging)

Hedging occurs in **financial markets**, not in the physical supply chain.

Airlines hedge fuel price risk using derivatives such as:

- crude oil futures
- jet fuel swaps
- heating oil futures
- fuel options

These contracts are settled **financially**, not by delivering crude oil.

3. Why Airlines Hedge Crude Oil

Historically, **jet fuel derivatives were less liquid** than crude oil markets.

Crude oil benchmarks such as: • **Brent crude and • WTI crude** are extremely liquid and actively traded.

Because **jet fuel prices move closely with crude oil prices**, airlines often hedge using crude oil futures as a **proxy**.

This is called: **Cross-hedging**

4. Example (Cross-Hedging)

Suppose:

Jet fuel price today = \$95/barrel

Brent crude price today = \$80/barrel

The airline hedges Brent.

If crude rises:

Brent crude rises to \$110

Jet fuel rises to \$130

The airline:

- pays higher price for jet fuel
- gains money on the crude oil hedge

The **hedge profit offsets the higher fuel cost**.

5. Modern Practice

Today airlines increasingly hedge **jet fuel directly** through:

- **Jet fuel swaps**
- **Jet fuel futures (ICE exchange)**

Structure:

Airline pays fixed price

Counterparty pays floating jet fuel price

Result: Airline locks in **fuel price stability**.

6. Classroom Example (Explanation)

Airline buys fuel physically from refinery

BUT

Hedges price risk in financial market

Two separate systems:

PHYSICAL MARKET	FINANCIAL MARKET
Jet fuel purchase from refinery	Futures / options on oil or jet fuel

They interact **through price**, not through physical delivery.

7. Real Industry Example

Many airlines hedge fuel:

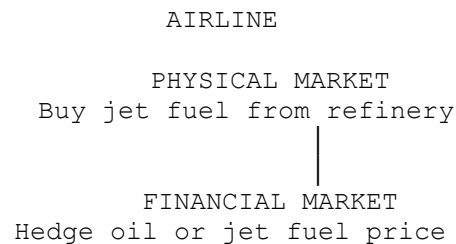
• **Southwest Airlines** (famous hedging success 2000s), • **Delta Airlines** (even bought a refinery in 2012), • **Aegean Airlines** (hedges large portion of fuel needs)

Delta bought a refinery **only to reduce refining margin risk**, not to deliver crude.

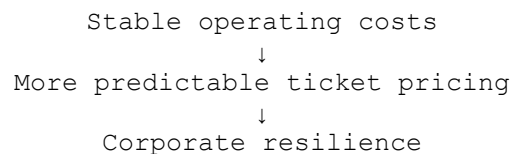
8. Final Teaching Insight

Hedging does not change the physical supply chain. It changes the **financial exposure to price risk**. The airline still buys fuel from the refinery. The hedge simply **compensates financially if prices rise**.

Simple Board Diagram for Students

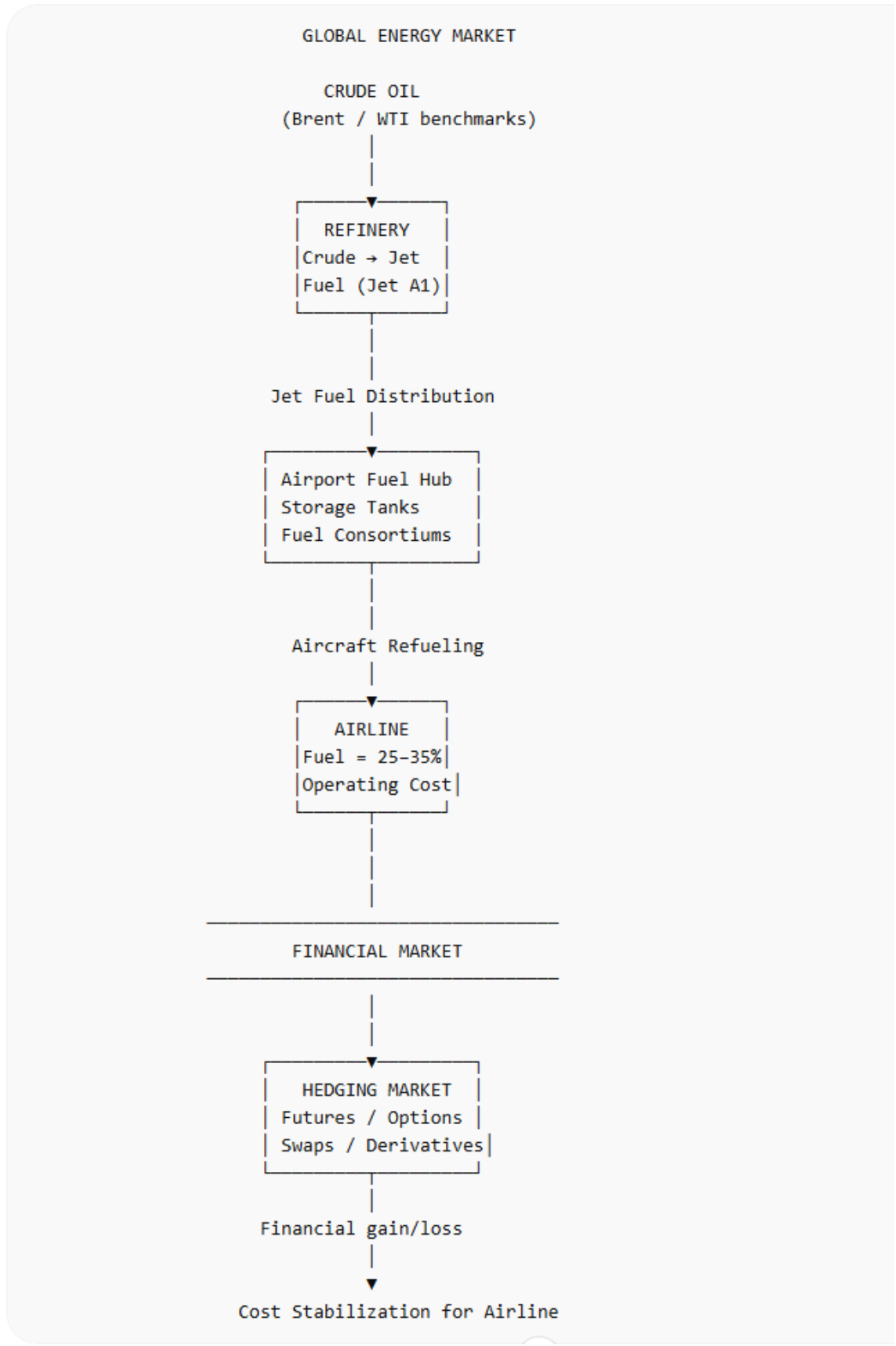


Result:



Aviation Fuel Ecosystem

(Physical Market + Financial Hedging Market)



Integrating Managerial Economics with Marketing Management

Fuel Hedging, Pricing Strategy, and Brand Equity in Airlines

1. The Core Economic Problem

Airlines face **high fixed costs** and **volatile fuel prices**.

Cost structure of airlines (simplified):

Cost Category	Share
Aircraft leasing	15–20%
Fuel	25–35%
Labour	15–20%
Maintenance	10–15%
Airport charges	10–15%

Fuel price volatility creates **pricing uncertainty**.

Without hedging:

Fuel \uparrow \rightarrow Costs \uparrow \rightarrow Ticket prices \uparrow \rightarrow Demand \downarrow

Which can push the firm **towards the Break-Even Point (BEP)**.

2. Role of Managerial Economics

Managerial Economics provides the **analytical tools**:

- Break-Even Analysis
- Cost curves
- Price elasticity of demand
- Revenue optimization
- Risk management

Example:

Average ticket price = €150
Break-even load factor = 72%

If fuel price increases suddenly: Cost per seat \uparrow and Break-even load factor \uparrow

The airline may suddenly need **80% occupancy to break even**. That is extremely risky.

3. Hedging as Strategic Cost Stabilization

Fuel hedging stabilizes **marginal cost**.

Future fuel cost \approx predictable

Therefore:

Stable marginal cost \rightarrow Stable pricing strategy

This is where **Marketing Management enters the system**.

4. Role of Marketing Management

Marketing uses this cost stability to design **pricing instruments and brand strategy**.

The marketing department knows:

- price elasticity of ticket demand
- willingness to pay
- consumer surplus
- route profitability
- distribution channel margins

With stable fuel costs, marketing can create **predictable pricing offers**.

5. Example: Fuel-Linked Ticket Pricing Strategy

Marketing can develop **new selling instruments**, such as:

Fuel-Locked Ticket

The airline may communicate:

“Book today and lock your airfare price for the entire year regardless of fuel price fluctuations.”

The mechanism behind this is:

Jet fuel hedged today
+
Forecast demand
+
Desired profit margin

Result:

Ticket price stability

6. Consumer Surplus Creation

When customers believe that **future prices may rise**, a fixed ticket price creates **consumer surplus**.

Example:

Ticket today = €150
Future ticket expected = €190

Consumer benefit:

Surplus = €40

Marketing communicates this value.

7. Link to Brand Equity

Stable pricing and risk management can strengthen **brand equity**.

Brand message:

Reliable airline
Predictable pricing
Transparent pricing policy

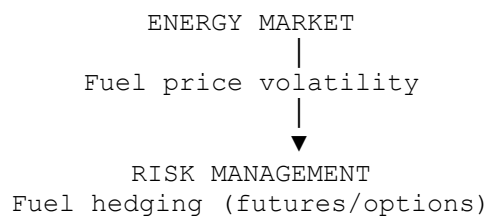
This creates:

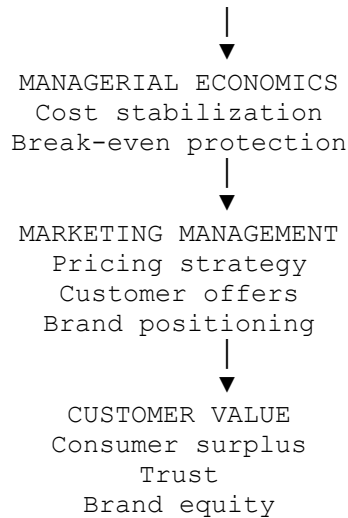
- trust
- loyalty
- repeat purchase
- lower perceived risk

Which increases **customer lifetime value**.

8. Integrated Airline Business System

You can show students this simple architecture.





9. Break-Even Advantage

Because fuel hedging stabilizes costs:

Actual load factor > Break-even load factor

After the BEP is reached:

Fixed costs are already covered

Therefore:

Additional passengers → high contribution margin

This is what allows airlines to offer **promotional pricing while remaining profitable.**

10. Strategic Insight for Students

The key lesson is:

Hedging is not only a financial technique.

It is a **strategic enabler of marketing and pricing policy.**

It allows the airline to operate:

- with **lower risk**
- above the **break-even point**
- while delivering **consumer value and brand strength.**

In modern firms, finance stabilizes costs, managerial economics designs the profit structure, and marketing converts this stability into customer value and brand equity.