



The options: what else the money could have done

Paid for by the public: as electricity billpayers, and as taxpayers standing behind the loans.

This page sets out alternative paths at their documented costs, results and risks, from official figures, next to what was actually spent (the real cost). It does not recommend one.

Labels used: OFFICIAL = a government, regulator, court or audit-body document; FILED = a company's own filed accounts; PRESS = a company release or trade press; INTERGOVERNMENTAL = an international agency; ACADEMIC = a university explainer or paper; ESTIMATE = this site's arithmetic or an assumption, shown. Where a source says "not published", this page says so. Each figure keeps its own price year; none has been forced equal.

1. Norway: the same size at its peak, a different policy

The UK and Norway offshore areas peaked at almost the same size: the UK at 4.49 million barrels of oil equivalent a day in 1999, Norway at 4.54 in 2004. Since then the two have moved apart. The tables below set out output, tax rates, the state's stake and state revenue, then what the regulators say about geology and policy.

Production, million barrels of oil equivalent a day

MEASURE	UK	NORWAY	CLASS
Peak year and level	4.49 (1999)	4.54 (2004)	OFFICIAL (NSTA; SODIR VIA THE NORWEGIAN MINISTRY OF ENERGY AND SODIR SITE)
2015	1.538	3.925	OFFICIAL
2025	1.094	4.122	OFFICIAL
Change since 2015	-28.9%	+5.0%	ESTIMATE
2030 projection	0.650	3.497	OFFICIAL
2040 projection	0.218	not published (no official figure found)	OFFICIAL

UK is crude oil plus natural gas liquids plus net gas; Norway is marketable oil, condensate, liquids and gas. The two peaks differ by +1.1% (estimate). The UK 2040 figure rests on NSTA's stated decline-rate assumption, not a field-by-field forecast. Norway's regulator says its longer-term production level "is uncertain".

Headline marginal tax rate on upstream profit

ITEM	2015	2022	2026	CLASS
UK, ring-fence corporation tax plus supplementary charge plus Energy Profits Levy	50%	40%, then 65% from 2028	68% May, 75% from 1 Jan 2023	ESTIMATE (SUM OF STATED RATES); NSTA STATES 78% FOR 2026
UK, Energy Profits Levy rate	none	25% from 26 May 2022	38% from 1 Nov 2023	OFFICIAL
Norway, ordinary tax plus special tax	78%	78%	78%	ESTIMATE (SUM OF STATED RATES); NORWAY STATES 78% FOR EACH YEAR

The rates match in 2026 but are built differently. Norway's special tax falls on a cash-flow base, with capital spending deducted at once and the tax value of a loss reimbursed the next year. The UK levy is temporary by statute, with a stated end date of 31 March 2030 or earlier, and a successor levy is in draft. OFFICIAL

State stake

ITEM	FIGURE	CLASS
Norway: direct state financial interest (SDFI)	187 production licences, 48 producing fields	OFFICIAL
Norway: SDFI share of licensee cash flows, 2025	39%	OFFICIAL
Norway: state share of Equinor	67%	OFFICIAL
Norway: oil fund market value, end 2025	NOK 21,268bn (about £1,567bn at 13.572 NOK per £)	OFFICIAL (STERLING FIGURE ESTIMATE)
UK: state stake in upstream oil and gas	none found	OFFICIAL (SOURCES READ)

The UK line is a statement about what was found. It is not proof that no UK public body holds any interest. The National Wealth Fund says it does not invest in oil and gas extraction, with very limited exemptions, and Great British Energy's statutory objects cover clean energy.

State revenue, 2024

ITEM	FIGURE	PRICE BASIS	CLASS
Norway: state net cash flow from petroleum, 2024	£58.3bn	Constant 2026 prices; NOK 742.8bn converted at 12.738 NOK per £	ESTIMATE ON OFFICIAL FIGURES
Norway: of which taxes and fees	about £35bn	Constant 2026 prices	ESTIMATE
UK: total net revenue, fiscal year 2024-25	£4.5bn (£4,469m)	Money of the day	OFFICIAL (HMRC)
Ratio, Norway to UK	13 times	Mixed	ESTIMATE

Price-basis caveat. The Norwegian series is in constant 2026 prices and the UK series is in money of the day, so the ratio is good to the nearest 10 to 20 per cent. As a check, Norway's 2015 figure in constant prices overstates its money-of-the-day figure by about 40%, and its 2025 figure by about 3%. ESTIMATE

Geology and policy

No regulator quantifies how much of the output gap is due to geology and how much to policy. The sources hold no counterfactual, such as UK output under the Norwegian system. The regulators and governments describe maturity in their own words.

- UK government: production "is in natural decline, with a 75% reduction in production occurring between 1999 and 2024". OFFICIAL
- HM Treasury: "The UK/UKCS is a mature basin." OFFICIAL
- Norway's regulator: the largest discoveries normally come at the start of exploration of a province, and it names one large field found in 2010 as the exception. OFFICIAL
- Norway's own stated reason for its 2020 temporary tax changes: without them investment "could have been lower". That is stated intent, not a measured effect. OFFICIAL

Reserves (the regulators' categories differ): Norway 13.6 billion barrels of oil equivalent, UK 2.9. OFFICIAL ; NORWAY
CONVERTED, ESTIMATE

WHAT IT WOULD COST	Not published. No source holds a costing of the UK adopting Norway's tax or state-stake model.
WHAT IT WOULD DELIVER	Norway's 2025 output is 4.122 million barrels of oil equivalent a day against the UK's 1.094, and it has risen 5.0% since 2015 while the UK has fallen 28.9%. No source measures how much of that is due to policy.
DOCUMENTED RISKS	Norway's state net cash flow ranged from £10.8bn (2020) to £114.4bn (2022) in constant 2026 prices. Its official projection for 2030 is 3.497 million barrels of oil equivalent a day, below 2025. The regulator says its longer-term level is uncertain. The UK has no state upstream stake to compare.

2. North Sea and the Atlantic frontier

This option keeps investing in UK offshore oil and gas, including areas west of Shetland. The figures below cover resources, the projected decline, falling capital spending, emissions against imported gas, the Energy Profits Levy, two field decisions, and one policy lever.

Resources, NSTA, end 2024

AREA	MEASURE	BILLION BARRELS OF OIL EQUIVALENT	CLASS
West of Shetland	Prospective, play-level, outside mapped leads and prospects, no cut-offs: P90, mean, P10	3.1 , 4.7 , 6.3	OFFICIAL
West of Shetland	Prospective, mapped leads and prospects, with NSTA's cut-offs (30 million boe unrisked, 15% chance of success): P90, mean, P10	0.2 , 0.7 , 1.3	OFFICIAL
Rockall Trough	Prospective, play-level, mean	2.5	OFFICIAL

Prospective means undiscovered. These volumes are not reserves.

Production projections, NSTA, February 2026

MEASURE	2025 ACTUAL	2026	2040 PROJECTED	CLASS
Oil, million barrels a day	0.65	0.594	0.162	OFFICIAL
Net gas, billion cubic feet a day	2.574	2.396	0.325	OFFICIAL

UK gas production in 2025 was 332.1 TWh, "lowest level since 1973". OFFICIAL , DESNZ The UK peak for oil was 2.845 million barrels a day in 1999. OFFICIAL

Capital spending on the UK shelf

YEAR	CAPITAL SPENDING, £M	EXPLORATION AND APPRAISAL, £M	CLASS
2022	4,071	535	OFFICIAL (NSTA); PRICE BASIS NOT STATED (NSTA'S PROJECTION TABLE LABELS THE SAME FIGURES 2025 PRICES)
2023	4,697	353	OFFICIAL
2024	5,703	209	OFFICIAL
2025	4,972	136	OFFICIAL
2026 to 2031, projected, £bn	3.8, 3.2, 2.7, 2.23, 1.85, 0.236	0.35, 0.136, 0.107, 0.107, 0.107	OFFICIAL (NSTA, FEB 2026, 2025 PRICES)

Capital spending is projected to fall to £1.68bn by 2031. No official source establishes cause and effect between the levy and the investment trend.

Imported gas against UK gas: emissions intensity, 2024

GAS SOURCE	KGCO2E PER BARREL OF OIL EQUIVALENT	CLASS
UK domestic gas	28 (18 upstream, 10 transport and processing)	OFFICIAL (NSTA, SEPT 2025)
Imported liquefied natural gas (LNG)	85	OFFICIAL
Norwegian pipeline gas	8	OFFICIAL
Ratio, LNG to UK gas	about 3.0 (85 / 28 = 3.04)	ESTIMATE

Combustion emissions are excluded. LNG made up 15% of UK gas supply and 46% of associated emissions in 2024. OFFICIAL The 2024 edition adds methane; the 2023 comparison covered carbon dioxide only, so the two are not strictly comparable.

The Energy Profits Levy

ITEM	FIGURE	CLASS
Rate	25% (May 2022); 35% (Jan 2023); 38% (Nov 2024)	OFFICIAL
Receipts, 2022-23, 2023-24, 2024-25	£2,632m; £3,587m; £2,857m	OFFICIAL (HMRC, SEPT 2025)
Statutory end date	31 March 2030, or earlier if prices stay at or below the thresholds	OFFICIAL
OBR assumption on the end	stops raising tax from the end of September 2027	OFFICIAL (OBR, MARCH 2026)
OBR receipts, £bn: 2024-25 outturn, then forecast to 2030-31	2.5, 2.5, 1.7, 0.9, 0.0, 0.0, 0.0	OFFICIAL
Successor	Oil and Gas Revenue Levy, 35% on Revenue above thresholds; draft legislation	OFFICIAL

HMRC's manual page still shows a 35% rate and an end date of 31 March 2028; its overview page and NSTA show 38% and 31 March 2030, which are used here.

Rosebank and Jackdaw, at 5 October 2026

ITEM	ROSEBANK	JACKDAW	CLASS
Application status	Under Review (page last updated 16 July 2026)	Under Review (page last updated 14 September 2026)	OFFICIAL
Consents	Court of Session, 29 January 2025: "All parties are agreed that the decisions were unlawful". The consents were reduced, with the effect		OFFICIAL (COURT)

ITEM	ROSEBANK	JACKDAW	CLASS
	suspended until a new decision.		
Decision	Not decided. The government says it will decide "as soon as we can".		PRESS (ENERGY VOICE, 24 SEP 2026)
Lifetime emissions assessed	254 MtCO2e	35.8 MtCO2e (2026 to 2037)	DEVELOPER'S FIGURES GIVEN TO OPRED: ROSEBANK OCT 2025, ITS HIGH (P10) CASE, THE DEVELOPER'S MOST LIKELY CASE ABOUT 30% LOWER; JACKDAW NOV 2025, ITS HIGHEST-PRODUCTION CASE (SCOPE 3 EMISSIONS)
Size and output	"estimated 300mn recoverable bbls" (a passing remark, not a reserves statement); floating production vessel oil capacity 70,000 barrels a day	About 6.5% of UK Continental Shelf gas production at peak	OFFICIAL (DEVELOPER'S SUBMISSIONS TO OPRED)
Capital cost	not published (redacted) over £1bn invested to date		OFFICIAL (DEVELOPER'S SUBMISSION)
Economic claim	Total gross value added £24.3bn over the field's life, £0.8bn a year on average	n/a	OFFICIAL (DEVELOPER'S SUBMISSION, NOT A GOVERNMENT FINDING)

Policy lever: domestic supply at domestic prices

Western Australia reserves part of its gas for its own market. The rule fixes a volume. It does not fix a price.

ITEM	FIGURE	CLASS
Reservation	15% of LNG exports reserved for the Western Australian market, policy for	OFFICIAL (GWA GOVERNMENT, UPDATED 18 JUN 2026)
How it is measured	Over the life of the project or agreement, not each year. Prices are set by market participants through confidential negotiation.	OFFICIAL
2024 change for new onshore projects	80% reserved to 31 December 2030	OFFICIAL
Compliance with the 15%	not published in any source read	N/A
Western Australia, average contract price, Q2 2025	A\$7.37/GJ (A\$7.29/GJ in Q2 2024); the data may only include a subset" of	OFFICIAL (AEMO, DEC 2015)
East coast: the Australian Government review, Dec 2025	"could establish a domestic gas reservation scheme"; aim to commence in 2027	OFFICIAL

The Western Australian price is an average contract price in a series that "may only include a subset" of sales, in Australian dollars per gigajoule. A comparison with east-coast prices is not shown: the Australian competition regulator's report could not be obtained in a way that respects its access rules. No source attributes any price gap to the reservation alone.

For the UK: no UK assessment of a gas reservation was found in searches of gov.uk, DESNZ, NSTA, Ofgem, the NAO, the CMA, the CCC, select committees and petitions. Hansard and the Commons Library were blocked and not read. A government reply to a petition on licences (17 July 2025) says "domestically produced oil and gas does not mean cheaper prices". OFFICIAL Any UK cost, volume or price effect of a reservation is not published.

WHAT IT WOULD COST

Rosebank capital cost: not published. Jackdaw: over £1bn spent to date by the developer. Public revenue at stake: the Energy Profits Levy raised £2,632m, £3,587m and £2,857m in 2022-23 to 2024-25, and the OBR forecasts £2.5bn in

WHAT IT WOULD
DELIVER

2025-26 falling to nil from 2028-29. The cost of any change to the levy: not published. A UK gas reservation: not published.

West of Shetland: mean 4.7 billion barrels of oil equivalent of play-level prospective resource outside mapped leads and prospects (no cut-offs), and separately 0.7 in mapped leads and prospects that pass NSTA's cut-offs. Rockall Trough: mean 2.5. NSTA projects UK output of 0.162 million barrels a day of oil and 0.325 billion cubic feet a day of gas in 2040 on current plans. Domestic gas carries about one-third of the emissions intensity of imported LNG (28 against 85 kgCO2e per barrel of oil equivalent, 2024, combustion excluded). Rosebank: 70,000 barrels a day capacity. Jackdaw: about 6.5% of UK Continental Shelf gas production at peak.

DOCUMENTED RISKS

Lifetime emissions, developers' high cases: Rosebank 254 MtCO2e (P10; the developer's most likely case about 30% lower), Jackdaw 35.8 MtCO2e (highest-production case, scope 3). Legal: consents reduced in January 2025 and the new decision still open. Prospective volumes are not reserves. Capital spending fell from £5,703m (2024) to £4,972m (2025), and NSTA projects £1.68bn by 2031.

3. Gas with carbon capture

This option pairs gas generation with capture and storage of the carbon dioxide. The government has committed £21.7bn over 25 years to the first two clusters. The generation cost sits close to offshore wind in the government's own table, and the National Audit Office has set out the delivery risks.

ITEM	FIGURE	CLASS
Track-1 funding commitment, 4 October 2024	£21.7bn over 25 years, for the clusters in the North West and North East	OFFICIAL (DESNZ)
Gas with carbon capture, levelised cost, 2030	£105/MWh (2024 prices, 900 MW plant, 88% load factor)	OFFICIAL (DESNZ)
Fixed offshore wind, same table, 2030	£103/MWh (2024 prices)	OFFICIAL (DESNZ)
Gas with carbon capture, 2035	£104/MWh	OFFICIAL
Gas without capture, 93% load factor, 2030	£111/MWh, of which carbon cost £41/MWh	OFFICIAL
Track-1 storage ambition	8.5 Mt of CO2 a year (two clusters)	PRESS (TRADE PRESS, 4 OCT 2024)
Amount DESNZ expected Track-1 emitters to capture	at most 4.9 Mt a year	OFFICIAL (NAO, JULY 2024)
Spent to mid-2024	£630m, mainly development grants	OFFICIAL (NAO)
Cost per tonne of CO2 stored under the Track-1 contracts	not published	N/A

The wind figure excludes connection costs, which the DESNZ table includes for other technologies. DESNZ calls gas with capture "a nascent generation technology in the UK". The 2030 and 2035 figures use the 2020 report for all cost components other than the capital cost of gas with capture, which is new in 2025.

Peterhead

ITEM	FIGURE	CLASS
Size in the application	up to 910 MW, gas with post-combustion capture	OFFICIAL (SCOTTISH GOVERNMENT ENERGY CONSENTS UNIT)
Consent status, checked 5 October 2026	"Consideration"; application received 18 February 2022, so about 4 years	OFFICIAL (THE ELAPSED TIME IS AN ESTIMATE)

ITEM	FIGURE	CLASS
Funding	No funding decision. A "programme of funded development work" is still to be agreed.	FILED (SSE ANNUAL REPORT, FY2026)
Capture rate	not stated for Peterhead; SSE's project page says carbon capture technology	PRESS (PROJECT PAGE, GENERAL DESCRIPTION)
Capital cost and consumer subsidy	not published	N/A
Acorn (Scottish Cluster), June 2025	Development funding of around £200m, "subject to business case"; the Spending Review says a final investment decision will be taken "later this Parliament". The Spending Review text gives no figure: the	OFFICIAL (DESNZ RELEASE, 19 JUNE 2025; SPENDING REVIEW)

The National Audit Office view, July 2024

"DESNZ will struggle to achieve its 2030 ambitions for carbon capture"

OFFICIAL · NAO, CARBON CAPTURE, USAGE AND STORAGE PROGRAMME, JULY 2024

- The government's funding "is unlikely to be enough to meet government's ambitions for CCUS deployment to 2030". OFFICIAL
- "The government does not have and is currently not developing a credible alternative pathway without the use of CCUS." OFFICIAL
- HM Treasury told the NAO that the parameters of its value-for-money assessment "were still under review". OFFICIAL
- The UK Infrastructure Bank estimated that the first two clusters needed £8 billion to £10 billion of private finance in 2024-25 alone. OFFICIAL
- This is the latest NAO report on the programme that was found.

Storage capacity

ITEM	FIGURE	CLASS
Theoretical capacity, UK seabed, P50	78 Gt of CO2, mostly saline aquifers	OFFICIAL (BGS, 2014 PAPER; REPEATED BY NSTA, DEC 2024)
BGS web page	"over 70 billion tonnes"	OFFICIAL
First permit, Endurance	up to 100 Mt over 25 years; 4 Mt a year injection rate; first injection to	OFFICIAL (NSTA)
Other licences, Dec 2024	26 appraisal and storage licences	OFFICIAL (NSTA)
Theoretical against practical capacity	not published	N/A

The 78 Gt is a static theoretical figure, not an injectable rate or a permitted volume.

WHAT IT WOULD COST	Government: £21.7bn over 25 years for Track-1; about £200m development funding for Acorn, subject to business case (DESNZ, June 2025). Peterhead capital cost and subsidy: not published. DESNZ levelised cost for gas with capture: £105/MWh in 2030 (2024 prices, 88% load factor), against £103/MWh for fixed offshore wind in the same table (excluding wind connection). Cost per tonne stored under the contracts: not published.
WHAT IT WOULD DELIVER	Track-1: up to 8.5 Mt of CO2 a year of storage capacity, but the NAO says emitters under negotiation would capture at most 4.9 Mt a year. Peterhead: up to 910 MW with post-combustion capture, not yet consented; no Peterhead capture rate is stated. Storage geology: 78 Gt theoretical.
DOCUMENTED RISKS	NAO: 2030 ambitions will be a struggle; funding unlikely to be enough; no credible alternative to carbon capture in the government's pathway; technology nascent; value-for-money test not complete; £8 billion to £10 billion of private finance needed in one year. Peterhead: consent undecided since February 2022 and no funding decision.

4. Shale gas

This option would produce gas from UK shale. The official estimate of gas in place is large, and the official position is that the recoverable share cannot be estimated. No official capital or production cost for UK shale was found.

ITEM	FIGURE	CLASS
Bowland-Hodder gas in place, 2013: low, central, high	822, 1,329, 2,281 tcf (23.3, 37.6, 64.6 tcm)	OFFICIAL (BGS/DECC)
Recoverable	"a reliable estimate of recoverable shale gas cannot be made at this time"	OFFICIAL (BGS/DECC)
Only official figures for what could be produced (2010, Upper Bowland only)	2.1 tcf (about 59 bcm) on an analogy with the Antrim Shale, or up to 4.7 tcf (159 bcm) if computed	OFFICIAL (QUOTED IN THE 2013 REPORT); THE 59 BCM IS COMPUTED
Scale of those figures	about 2 to 4 years of 2025 UK gas production (332.1 TWh)	ESTIMATE
BGS, 2019	Resources "could be much lower than first thought"; the study used "a very small number of rock samples from only two locations"	OFFICIAL
BGS review for government, September 2022	Gas present "may be significantly lower and spatially more restricted than initially estimated"	OFFICIAL
A later gas-in-place number	about 4.0 tcm (2019 analysis)	ACADEMIC (LSE EXPLAINER CITING BGS; BGS'S OWN STATEMENT GIVES NO NUMBER)
Capital or production cost	not published	N/A

tcf = trillion cubic feet; tcm = trillion cubic metres; bcm = billion cubic metres. The 2.1 and 4.7 tcf figures are one-unit analogies, not forecasts. No BGS review of the gas-in-place figure after 2022 was found.

Policy history

DATE	EVENT	CLASS
2 November 2019	Immediate moratorium. First reason given: it is "not currently possible to accurately predict the probability or magnitude of earthquakes linked to fracking operations". Second: a magnitude 2.9 event recorded on 26 August 2019 at Preston New Road.	OFFICIAL (BEIS AND OGA)
22 September 2022	Moratorium lifted. Future applications to be considered "with the domestic and global need for gas in mind and where there is local support".	OFFICIAL (BEIS)
26 October 2022	Re-imposed, citing the 2019 manifesto. This rests on trade press ; no official text was found, because the Parliament sites returned HTTP 403 and were not circumvented.	PRESS (GROUND ENGINEERING)
April 2026	"the Labour Government has maintained this moratorium"	OFFICIAL (LEGISLATURE RESEARCH SERVICE)

WHAT IT WOULD COST	Not published. No official capital or production cost for UK shale was found. BEIS's 2022 line is that lifting the pause "will enable drilling to gather this further data".
WHAT IT WOULD DELIVER	Gas in place, Bowland-Hodder: 822 to 2,281 tcf, central 1,329 tcf (BGS/DECC, 2013). Recoverable: BGS/DECC said it cannot be estimated. The official yield figures are 2.1 to 4.7 tcf (about 59 to 133 bcm) for the Upper Bowland, on analogies with two US shales (2010), about 2 to 4 years of 2025 UK gas production (estimate). BGS in 2019 and 2022 says the true figure may be much lower.
DOCUMENTED RISKS	The OGA found in 2019 that induced earthquakes could not be accurately predicted; BGS in 2022 said forecasting large earthquakes, induced ones included, "remains a scientific challenge". A magnitude 2.9 event occurred at Preston New Road on 26 August 2019. Knowledge gaps in other basins. Policy changed three times: moratorium in November 2019, lifted in September 2022, re-imposed in October 2022 (the last on trade-press evidence).

5. Nuclear in series

This option builds the same reactor design repeatedly. Project costs for Hinkley Point C and Sizewell C are on [the nuclear page](#). This section covers only the evidence on whether repeat building lowers cost. The evidence points both ways.

"SZC's project baseline construction cost is 22% lower than the lowest current estimate for HPC"

OFFICIAL · NAO, SIZEWELL C, HC 33, 20 MAY 2026

The 22% excludes some costs in the regulatory thresholds, the main one being a £1.6bn payment to Hinkley Point C. The Sizewell C project baseline is £38.2bn. OFFICIAL (NAO)

ITEM	FIGURE	CLASS
EVIDENCE POINTING TO LOWER COST		
Design replicated at Sizewell C	around 85% of the above-ground design	OFFICIAL (NAO)
Sizewell C against Hinkley Point C, cost per kW	about £11,650 against about £15,000 (22.5% lower)	ESTIMATE £538.12BN OVER 3,278 MW; £49.0BN, ITSELF AN ESTIMATE, OVER 3,260 MW)
Pairs of reactors	second reactor about 15% cheaper	INTERGOVERNMENTAL (OECD NUCLEAR ENERGY AGENCY, JULY 2020)
Series construction	total costs "25-40% lower"	INTERGOVERNMENTAL (NEA)
Barakah, UAE, units 1 to 4	costs fell more than 50% between the first and fourth units	INTERGOVERNMENTAL (NEA, CITING A 2019 DATABASE STUDY; NOT A PRIMARY COST SERIES)
France, second pair on a site against the first, cost per MW	31% lower (Tricastin), 24% (Paluel) (20% (Cattenom)	ESTIMATE ON OFFICIAL FIGURES (COUR DES COMPTES, JAN 2012, FROM EDF DATA)
EVIDENCE POINTING TO HIGHER COST, OR TO NO FALL		
France, national series, cost per MW in 2010 euros	€1.07m (1978, Fessenheim) to €2.06m (2000, Chooz) or €1.37m (2002, Civaux)	OFFICIAL (COUR DES COMPTES)
Cause given for the French rise	"notamment du fait de l'application de réglementations plus contraignantes" (stricter safety rules)	OFFICIAL (COUR DES COMPTES)
Shin Kori 3 and 4, Korea, announced against ex-post cost	US\$1,828/kWe against US\$2,410/kWe about 32% over (2,410 / 1,828 = 1.32)	INTERGOVERNMENTAL (NEA); OVERRUN IS AN ESTIMATE
Korean cost data	The only country where overnight costs "appear to decline over time in the modern era is South Korea", but the data "do not come from an independent source"	ACADEMIC (REPLY TO A PEER-REVIEWED PAPER, 2016 DRAFT)

ITEM	FIGURE	CLASS
US study, 2020	Building subsequent plants on an existing design "costs more, not less"	PRESS (UNIVERSITY PRESS RELEASE; THE PAPER WAS NOT OBTAINED)

Delay between UK units	Could reduce "the benefit from replicating HPC"	OFFICIAL (NAO)
The NEA table lists the Korean figures next to Vogtle 3 and 4 at US\$4,300 to 8,600 and Flamanville 3 at US\$1,886 to 8,620, so Korean costs were lower than Western ones even though they rose against budget. The French reading: costs fell between paired units on one site and for follow-on units, and rose across the national series as safety rules tightened.		

What the UK government says. DESNZ states the benefit as reduced risk of time and cost overruns, not as a quantified fall. A UK percentage cost fall from a fleet of identical reactors is not published. The Nuclear Regulatory Review summary (24 November 2025) says the UK "has become the most expensive place in the world to build nuclear projects". OFFICIAL

WHAT IT WOULD COST	Hinkley Point C: £35bn to £36bn in 2015 prices (EDF's latest scenarios, as set out by the NAO). Sizewell C: £38.2bn project baseline (2024-25 prices, NAO). A UK fleet cost: not published.
WHAT IT WOULD DELIVER	Sizewell C baseline 22% below Hinkley Point C's lowest estimate, with 85% of the above-ground design replicated; about £11,650/kW against about £15,000/kW (estimate). NEA: about 15% off the second reactor of a pair and 25-40% off total costs in series construction. Barakah costs fell more than 50% between unit 1 and unit 4 (secondary source).
DOCUMENTED RISKS	Costs fell in pairs but rose across the French national series, partly from stricter rules. Shin Kori 3 and 4 finished about 32% over the announced budget. Korean cost data are not independently audited. A US study reports later plants costing more. Delay between UK units can erode the replication benefit. The NAO and DESNZ state the benefit as reduced risk, not a quantified fall.

6. Energy-intensive industry

This option lowers electricity costs for the heaviest industrial users. UK large users pay the most in the comparison group. The figures below cover prices, the support already in place, and the steel industry.

Large-user electricity prices, 2025, including taxes

Users of 20,000 to 69,999 MWh a year, annual average, pence per kWh. Comparison group: the EU14 plus the UK. OFFICIAL, DESNZ QUARTERLY ENERGY PRICES, 28 MAY 2026

COUNTRY	P / KWH
United Kingdom (rank 15 of 15)	24 . 35
Ireland	17 . 74
Italy	14 . 14
Germany	13 . 62
Netherlands	11 . 04
Spain	9 . 41
France	7 . 91
Sweden	5 . 95
EU14 plus UK median	11 . 04

The UK is 120% above the median. OFFICIAL , DESNZ Excluding taxes, large users: UK 17.98 against a median of 9.93, 81% above. Medium users including taxes: UK 25.85 against 13.83, 87% above. DESNZ's June 2026 headline: prices "were highest in the UK compared with the EU14 plus UK". For industrial gas the picture differs: the UK had the eleventh lowest price of 24 in the IEA group in 2024. OFFICIAL A comparison with the G7 and other non-EU countries for 2025 is not published in the current DESNZ tables.

Support already in place

ITEM	VALUE	CLASS
Network charging compensation, 60% to 90% from 1 April 2026	£310m to £420m a year (2025 prices)	OFFICIAL (DBT)
Supercharger, April 2026	"a £420 million boost for around 500 of the UK's most energy-intensive businesses"; latest wording (1 October 2026) "over £400 million per year"	OFFICIAL (GOV.UK)
British Industrial Competitiveness Scheme, eligibility widened from 7,000 to over 10,000 businesses	up to £600m a year from April 2027	OFFICIAL (GOV.UK, 15 APR 2026)
Existing exemption scheme	around £400m a year; cost met by other consumers, £4 to £6 a year on a household	OFFICIAL (DBT IMPACT ASSESSMENT JAN 2024)
Effect on steel electricity prices	£168/MWh to £86/MWh on average; about £40 a tonne for electric arc furnace	OFFICIAL (DBT STEEL STRATEGY, 20 MAR 2026)
Net present social value of the Supercharger package	£9.4bn (2020 prices, 10-year appraisal)	OFFICIAL (DBT); A SOCIAL VALUE, NOT A SUBSIDY COST
Total package value	not published	N/A

The only "£2bn" figure found is a historical total: "More than £2 billion since 2013" (gov.uk, 2023). The cost of bringing UK prices to the EU median is not published.

Steel

ITEM	FIGURE	CLASS
UK crude steel output	10.9 Mt (2015); 5.6 Mt (2023); 4.0 Mt (2024); 2.6 Mt (2025)	OFFICIAL (2015 AND 2024 DBT); PRESS (WORLDSTEEL, 2023 AND 2025)
2025 against 2015	76% lower (2.6 / 10.9 = 0.24)	ESTIMATE
Causes named in the Steel Strategy	"global overcapacity compounded by high operating costs", including "high electricity and labour costs"	OFFICIAL (DBT)
Share of the decline due to energy cost	not published	N/A
Public money on steel	about £350m anticipated to acquire Speciality Steel UK (four sites)	OFFICIAL (FOUR SITES, DBT); PRESS REPORT OF A MINISTERIAL STATEMENT (£350M)

No document read separates energy cost from overcapacity, imports and the end of blast-furnace sites. An official aluminium output series was not found; the only source read is a 2012 think-tank paper. PRESS The Scottish Government has given a 25-year guarantee on the hydro supply to the Lochaber smelter, from December 2016. OFFICIAL (SCOTTISH PARLIAMENT PAPER, FEB 2026)

Carbon leakage

The government names carbon leakage as a risk and says it "is committed to tackling" it. A UK Carbon Border Adjustment Measure starts on 1 January 2027. Options on export leakage are still being assessed, and indirect emissions are in scope "delayed until 2029 at the earliest". OFFICIAL,

WHAT IT WOULD COST	Support already in place: about £400m a year (exemption scheme) plus £310m to £420m a year (network-charge relief) plus up to £600m a year from April 2027. Total package value: not published. The cost of bringing UK prices to the EU median: not published.
WHAT IT WOULD DELIVER	UK large industrial users pay 24.35 p/kWh including taxes against an EU14 plus UK median of 11.04. Support reduces steel producers' electricity from £168 to £86/MWh. A change in output is not forecast in any source read.
DOCUMENTED RISKS	Carbon leakage is the government's own named risk; export leakage and indirect-emission coverage stay unresolved until 2029 at the earliest. Steel output fell from 10.9 Mt (2015) to 2.6 Mt (2025), with the cause shared between overcapacity and cost. The cost of support falls on other consumers.

SOURCES

Project research files: research/ALTERNATIVE-OPTIONS.md, compiled 5 October 2026 (main source); research/UK-NORWAY-OIL-GAS.md, prepared 5 October 2026; research/NUCLEAR-COMPARISON.md, compiled 5 October 2026; research/SOVEREIGN-BRIEFING-REVIEW.md, Addendum 3, 16 September 2026. Primary sources behind them: DESNZ Electricity Generation Costs 2025; NAO, carbon capture, usage and storage programme, July 2024; NAO, Sizewell C (HC 33), 20 May 2026; OECD Nuclear Energy Agency, reducing the cost of nuclear construction, July 2020; Cour des comptes, nuclear sector report, January 2012; NSTA Reserves and Resources, end 2024; NSTA production and medium-term projections, February 2026; NSTA emissions intensity factsheet, September 2025; OBR Economic and fiscal outlook, March 2026; HMRC government revenues from oil and gas production, September 2025; BGS/DECC Bowland shale gas report, 2013; BEIS and OGA, 2 November 2019; BEIS, 22 September 2022; DESNZ Quarterly Energy Prices, 28 May 2026; DBT Steel Strategy, 20 March 2026; gov.uk announcements of 15 April 2026 and 1 October 2026; DBT impact assessment, January 2024; Western Australian Government, domestic gas policy, updated 10 June 2026; AEMO, December 2025; Australian Government Gas Market Review, December 2025. Also used: Court of Session judgment [2025] CSOH 10, 29 January 2025; the Rosebank and Jackdaw developers' submissions to OPRED; Energy Voice, 24 September 2026; the Scottish Government Energy Consents Unit record for Peterhead; SSE annual report, FY2026; SSE Thermal's Peterhead project page; DESNZ release, 19 June 2025; BGS statement, August 2019, and BGS review for government, 2022; LSE Grantham Institute shale explainer; Ground Engineering, November 2022; Northern Ireland Assembly research paper, April 2026; worldsteel, World Steel in Figures 2025 and 2026; Nuclear Regulatory Review summary, 24 November 2025; DESNZ DUKES 2026 chapter 4 and UK Energy in Brief 2026; DBT release, 18 July 2025; a PA report of 14 September 2026 on Speciality Steel UK; ECB euro reference exchange rates. Norwegian figures come through the Norwegian petroleum site run jointly by the Ministry of Energy and Sodor, because the regulator's own site blocked plain requests. The Gas Market Review and a Western Australian Parliament committee report were read from Internet Archive copies; the content is treated as the official text but the route is flagged. Not published or not found: Peterhead capital cost and subsidy, cost per tonne stored under the Track-1 contracts, Rosebank capital cost, a UK fleet cost for nuclear, a UK assessment of gas reservation, a G7 industrial price comparison, an official aluminium output series, and the share of steel decline due to energy cost. Related pages: [the real cost](#), [nuclear](#), [risk and return](#), [money leaving the UK](#).

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