

Understanding the current Energy Crisis

Taking our energy future into our own hands



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 - Energy usage
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- Understanding why are we in this mess
- Understanding your energy bill
- Understanding Government future energy policy options
- Our energy future - what can we do now as individuals?
- Concluding remarks

Why are we in this mess? (1)

- **1991 UK energy sources at start of deregulation**
 - Abundant coal-fired power generation (from UK coalfields)
 - Substantial Nuclear generation (from UK reactors)
 - Abundant North Sea natural gas
 - Negligible volumes of Renewables, with few Green Levies
 - UK energy industry was UK-owned (by we, the taxpayers!)
 - UK energy prices largely set domestically

Why are we in this mess? (2)

- 2022 – UK energy sources now very different
 - UK energy industry largely foreign-owned : failure to create a UK ‘National Champion’ (unlike most of the EU countries)
 - Rise in UK energy imports
 - Decarbonisation removing coal and older gas-fired power generation
 - Nuclear generation winding down as older stations retire
 - Big increase in renewable (intermittent) generation, but.....
 - ..a near total reliance on flexible gas generation to stabilise ‘intermittents’ renewables

Why are we in this mess? (3)

- **Fundamental design flaw in UK energy market design :**
 - Move to international free-market pricing for energy
 - UK energy prices are now set *globally*, holding us hostage
 - **This flaw was known about at the time, but ignored!**
- See this in context 2020-22:
 - The post-pandemic recovery boosted energy demand.....
 -but the energy infrastructure unable to cope with that increase....
 -and oil and gas prices soared
- **But gas also sets the price of UK electricity (“marginal pricing”)**
- Results in **double-whammy** for UK energy consumers :
 - 16-fold increase in gas prices at the high of the spike
 - Gas prices still highly elevated for next 3 years
 - Electricity prices soared, driven higher by gas-fired generation costs

How your fuel bill is broken down

Typical customer on a price capped dual-fuel tariff paying by direct debit from 1 October 2022

Total annual cost: **£3,549**



*Wholesale costs include profits to extractors

Source: Ofgem



Charge
Wholesale
Retail Price Curve
Capacity Market
Policy
CFD
FiT (Feed in Tariff)
AAHEDC
WHD (Warm Home Discount)
ECO (Energy Company Obligation)
GGL (Green Gas Levy)
RO (Renewable Obligation)
Adjustment Allowance
Network
DUoS
TNUoS
BSUoS
Metering Costs
(SOLR) Network
Operating Costs
Payment uplift
REGO
Headroom
EBIT
Mutualisation Costs
BSUoS
Imbalance
UIG
Loss in Transmission
VAT

- Note that Wholesale energy costs dominate the total
- In the future, we are hostage to global energy prices

- Truss took a shotgun approach to energy self-sufficiency
 - Chasing ‘Green’ and ‘Black’ alternatives simultaneously
- We don’t yet know what Sunak & Hunt will replace it with
 - Fracking is off the table again (phew!)
- A mixed approach looks essential
- Green Projects are in limbo while the Levies are sorted out
- Questions remain around accelerating renewables such as on-shore wind, solar, and battery storage
- Nuclear? ‘Green’ Hydrogen?
- Our bills won’t be getting back to ‘normal’ for years
- The Ofgem Price Cap has not vanished
 - It sets how big the UK taxpayers’ bill will be

- Policy consistency is essential
 - Admit that there is a problem to be solved
 - Show leadership based on a common vision, not riven by internal dissent
 - Can't credibly pursue a fossil fuel and green policy simultaneously
 - Rebuild international credibility
- Short-term
 - Reinstate Green Levies & stop fracking
 - Stabilise support packages for domestic and business consumers
 - Start revising energy market rules around gas-electricity price links
- Medium term
 - Align renewable generation capacity with storage capacity
- Long-term
 - Manage decarbonisation and move to renewables

- **Truss launched the Domestic Energy Price Guarantee (EPG)**
 - Part of her Energy Support Package in response to a dire energy crisis (little choice)
 - Capped domestic prices at £2,500 for 2 years
 - **The Hunt version of the EPG**
 - Domestic Price Cap is fixed at £2,500 until March 31st 2023
 - Then £3,000 until March 31st 2024
 - Still 100%+ rise on last winter, and after that who knows – civil unrest?!
 - Ever-present threat of further tinkering, even outright abandonment
 - Business support still uncertain; failures could cripple employment
 - **OMG! Do I now have to pay it back to Hunt?**
 - No, not through a direct levy on energy consumers (**yet!**)
 - Will be added to the National Debt, so taxes will rise
 - Suspension of ‘Green Levies’ will have cost consequences.....
 -as will the government’s other supply-side reforms
 - **Can I live with these price rises?**
 - Essential to start by understanding your energy consumption so you can make savings
 - Businesses : understand your bills and your meter data
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- Ofgem Price Cap remains in force, and sets the reference point for EPG pricing
- Cornwall Insight latest forecast of the Ofgem Price Cap :

Our latest Default Tariff Cap forecasts:

	Q1 2023 CI Forecast (Jan- Mar)	Q2 2023 CI Forecast (Apr- June)	Q3 2023 CI Forecast (July- Sept)	Q4 2023 CI Forecast (Oct- Dec)
Electricity	£2,093.71	£1,826.56	£1,432.72	£1,477.11
Gas	£2,151.38	£1,912.54	£1,762.57	£1,736.35
TOTAL	£4,245.09	£3,739.10	£3,195.29	£3,213.46

Total cost of the Hunt EPG is around £39bn

- **We have to take our energy destiny into our own hands**
 - Tomorrow is too late : understand the issues (energy prices and consumption)
 - Become active : engage, join energy groups, pressure your politicians
 - Make your own contribution no matter how small
- **How you can contribute to your own energy destiny:**
- **1. Realise that Planet Earth does not have a backup copy!**



- **2. Short-term action needed now**
 - **Primary : reduce your unnecessary energy consumption**
 - Reduce thermostats, boiler gas-flow temperature, lights, introduce zonal heating, minimise devices on Standby
 - Improve insulation
 - **Secondary : move consumption to cheaper times of the day**
 - Domestic – are you on Economy 7 or Time-Of-Day rate?
 - Business – are you on any kind of Time-of-Day rate?
 - Use timers – move washing times etc
 - National Grid offers re. reducing peak-time usage
 - **3. Is your car journey strictly necessary?**
 - **4. Is your local politician committed?**
 - **5. Claim whatever financial support or relief you can : CAB advice**
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Concluding Remarks

- Why we are in this mess – political ineptitude spanning 30 years
- We await Hunt's successor to Truss' EPG and his energy strategy
- International natural gas prices have fallen back, but still hold us hostage
- Domestic & business energy prices look stable for next 6 months...
- ..but at potentially vast cost to the taxpayer
- The threat of extended energy poverty looms
- Removal of Green Levies and re-introd'n of fracking is NONSENSE!
- Best to take a cold, long-hard look at your energy consumption...
-and reduce wherever possible
- We must take our energy destiny into our own hands

Thank you - any questions?

