Dieter Helm is the author of
Burn Out: The endgame for fossil fuels

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LECTURE TWO

THE END OF HIGH PRICES

THE 2014 PRICE FALLS AND THE CONSEQUENCES

PRESENTED BY

PROFESSOR DIETER HELM CBE

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OUTLINE

- **Why the super-cycle ended**
- **The supply side** – shale oil and shale gas and petrochemicals
- **The demand side** – breaking the link to GDP and the normalisation of China
- **The consequences** – for Putin, for the Saudis

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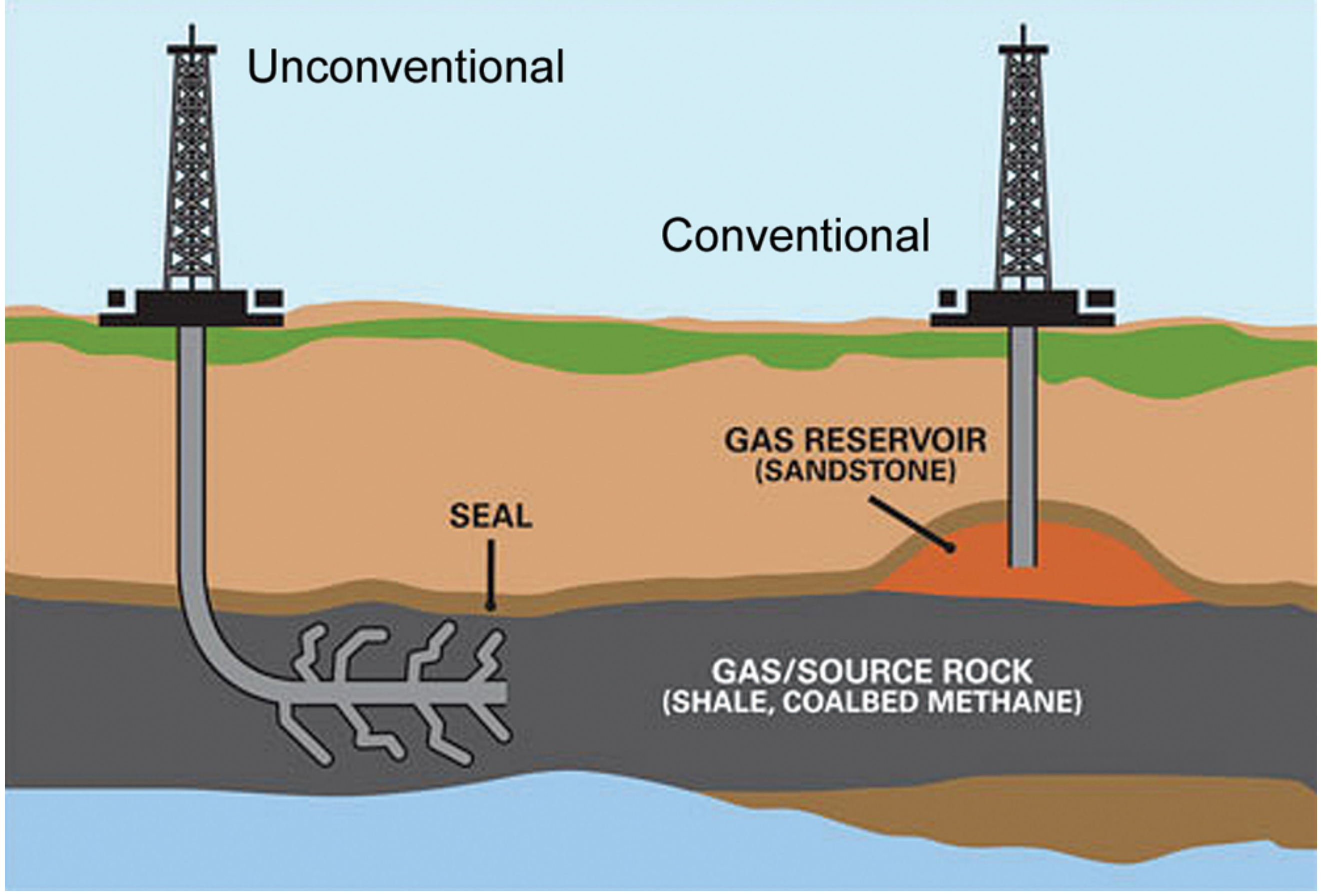
THE SUPPLY SIDE

I: THE SHALE REVOLUTION

Shale is the combination of:

- horizontal drilling
- seismic information
- fracking the rocks

SHALE VERSUS CONVENTIONALS



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LOTS MORE SHALE TO COME

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THE SUPPLY SIDE

II: GAS CUTS INTO OIL

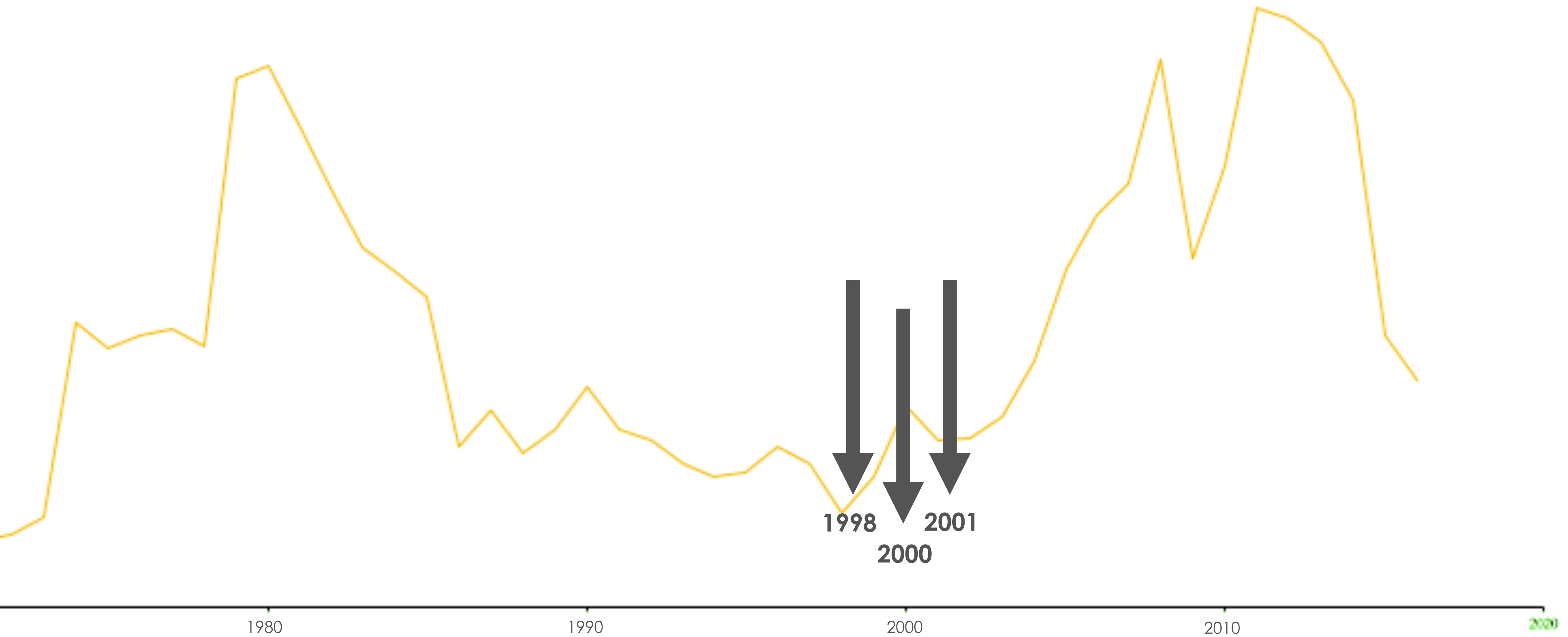
- **Transport**
  - Petrol/diesel to hybrids to electric
  - Gas to electricity to cars
- **Petrochemicals**
  - Naphtha to Ethane
- **And then…**
  - Electrification and digitalisation

THE DEMAND SIDE

I: NORMALISATION OF CHINA

- Post 2007/2008 crisis
- The slowdown in GDP
- Environmental damage refocuses policy
- End of the great economic miracle

THE WINDFALL TO PUTIN



SAUDI TROUBLES

- Fast growing population: majority >18 years old
- $90 oil needed to balance the budget
- ½ SWF already spent
- £100 billion for the "Hotel prison"
- £2 trillion Saudi Aramco??

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SUMMARY

- Markets work!
  - Supply ↑ as price ↑: demand ↓ as price ↑
- The revolutionary nature of shale and its cost structures
- Oil = big markets
  - Transport and petrochemicals – under threat
- Oil producers need to wake up and smell the coffee!
- Gradual medium term oil price falls

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THANK YOU

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