UK Gas Wholesale Market

Ofgem - Winter 07/08 Seminar
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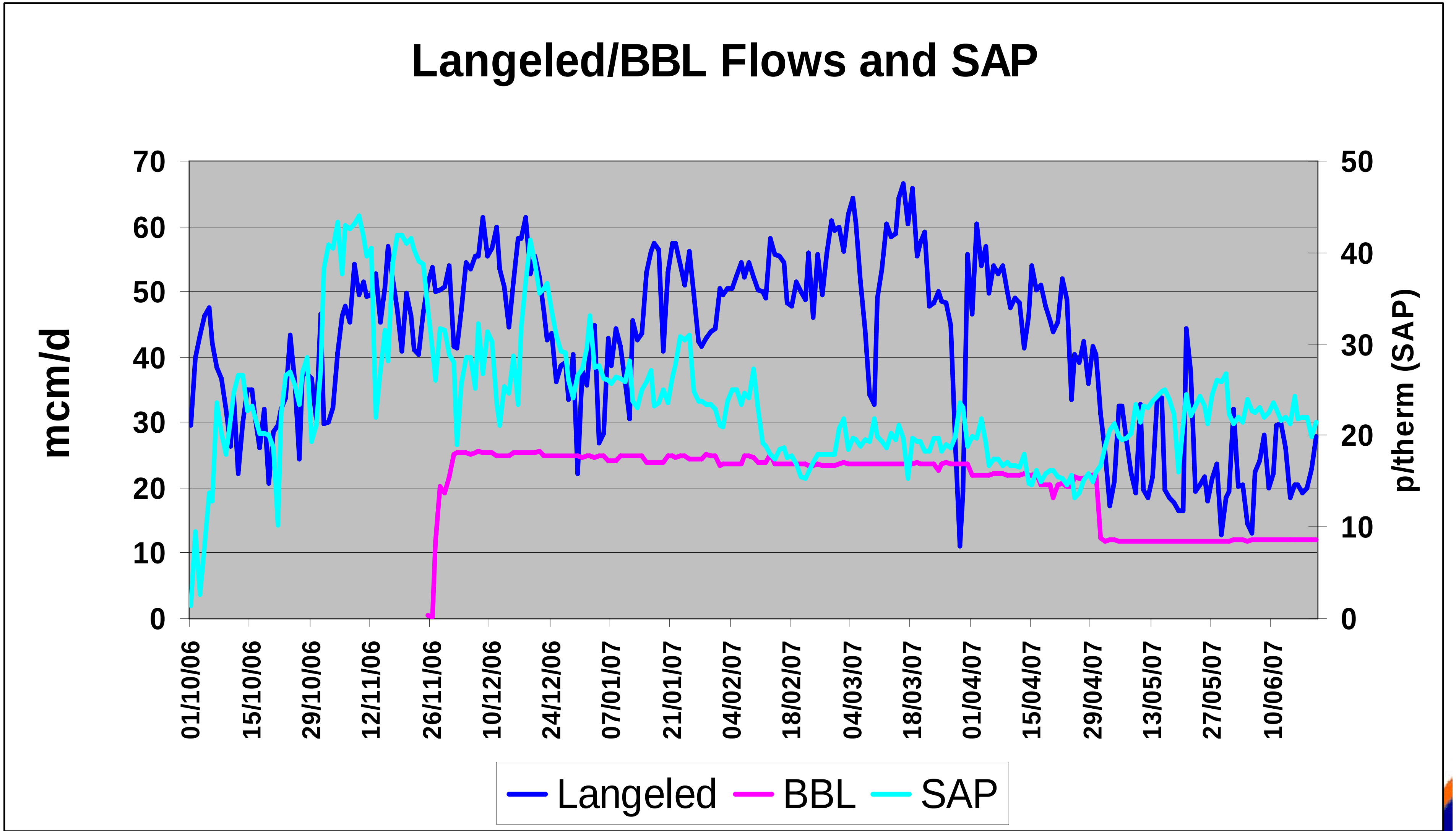
Agenda / Topics

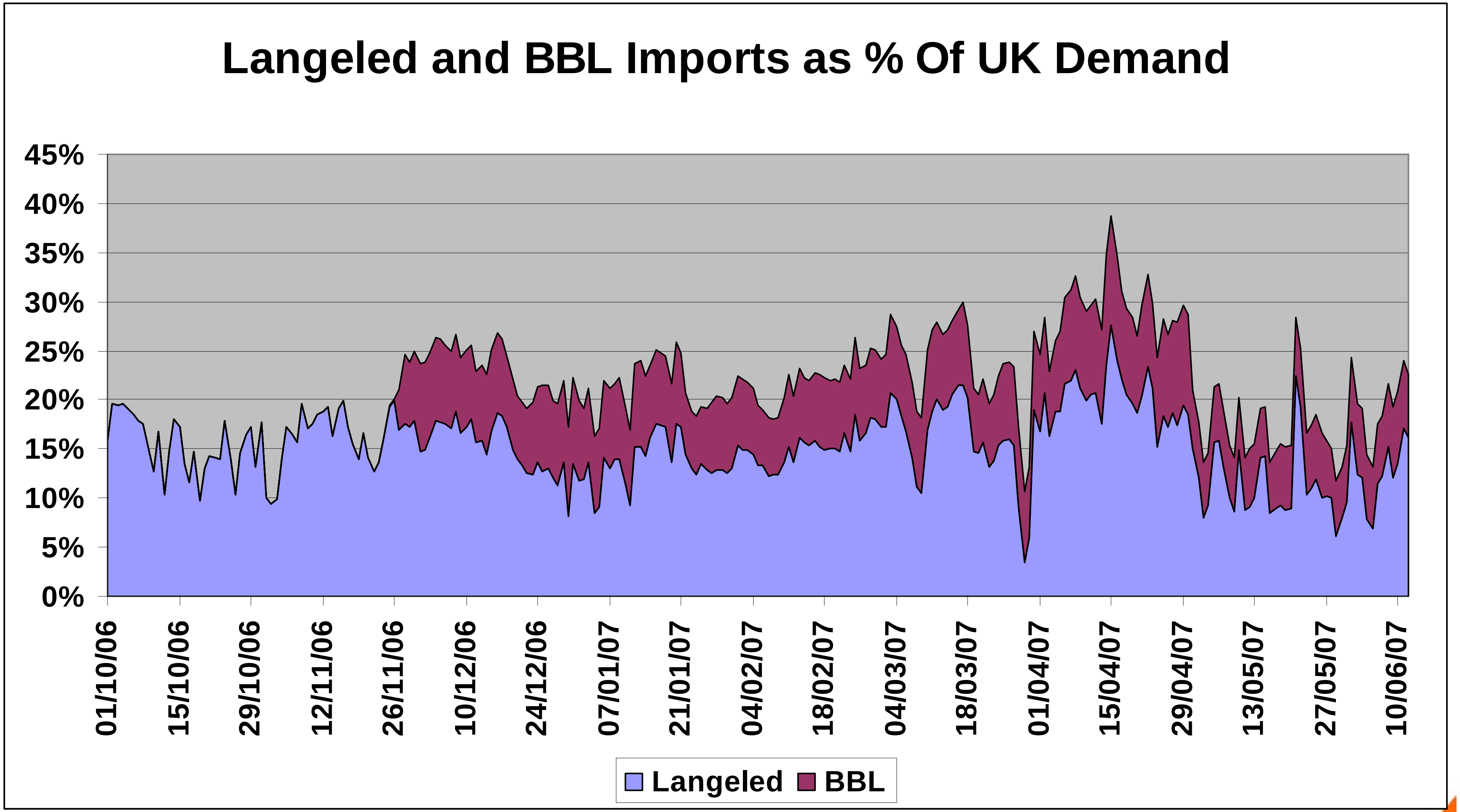
- New Imports
- Fullness of storage
- Movement in LDZ demand
- Weather/Security of Supply
- LNG Diversions
- Winter 07/08 Overview

Supplies via Langeled and BBL do not seem to be price sensitive but rather production driven



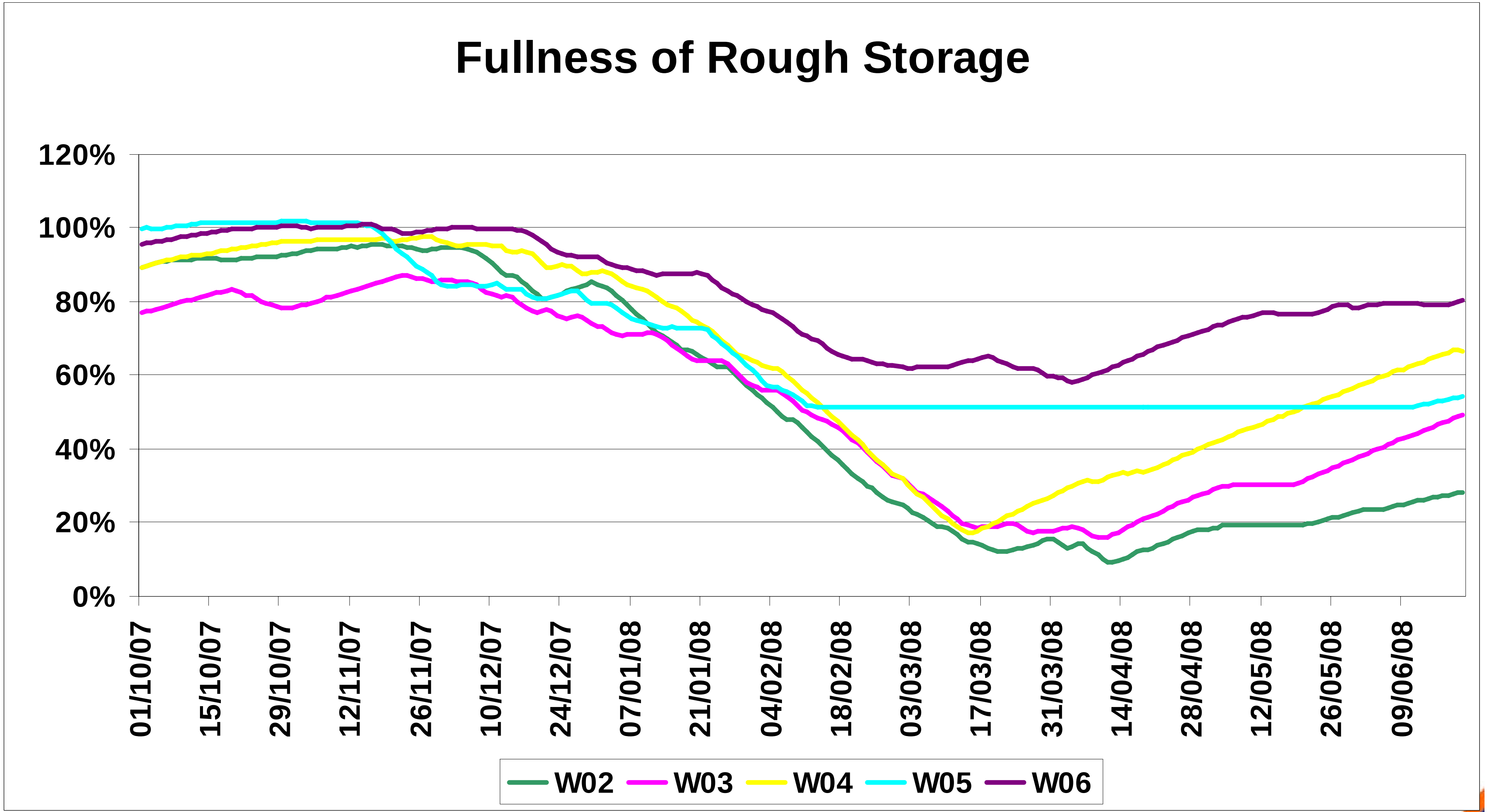
The high volatility of Langeled flows suggests that the UK is taking the swing in NCS production and contractual downturn by continental players

Langeled and BBL are making a major contribution to UK supply



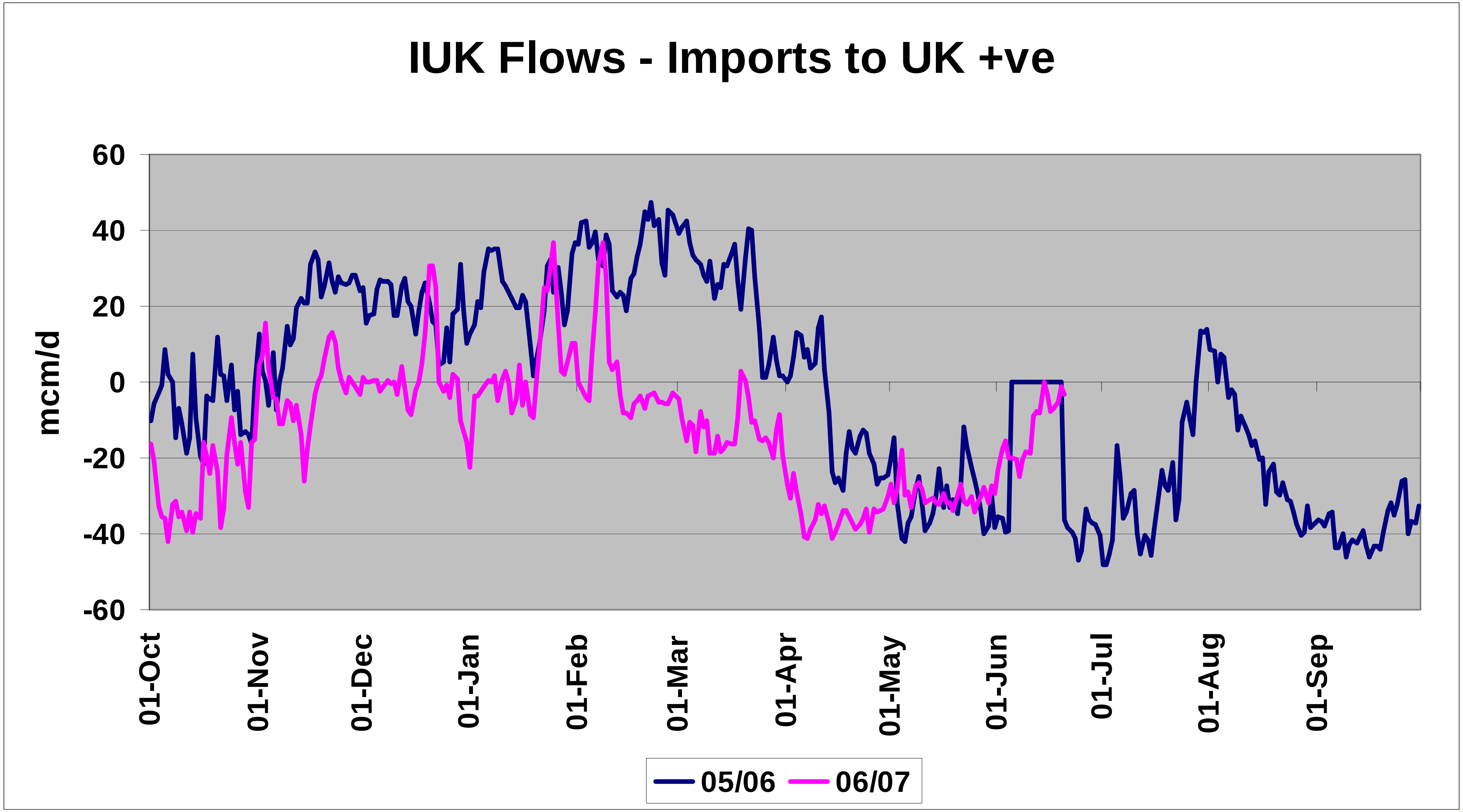
During the winter imports via Langeled and BBL represented about 20% to 30% of UK demand ('end user') – falling to 15% to 20% since May

Rough storage 80% full



Lower storage demand through Q3 and October – particularly with Continental storage also filling fast ……..

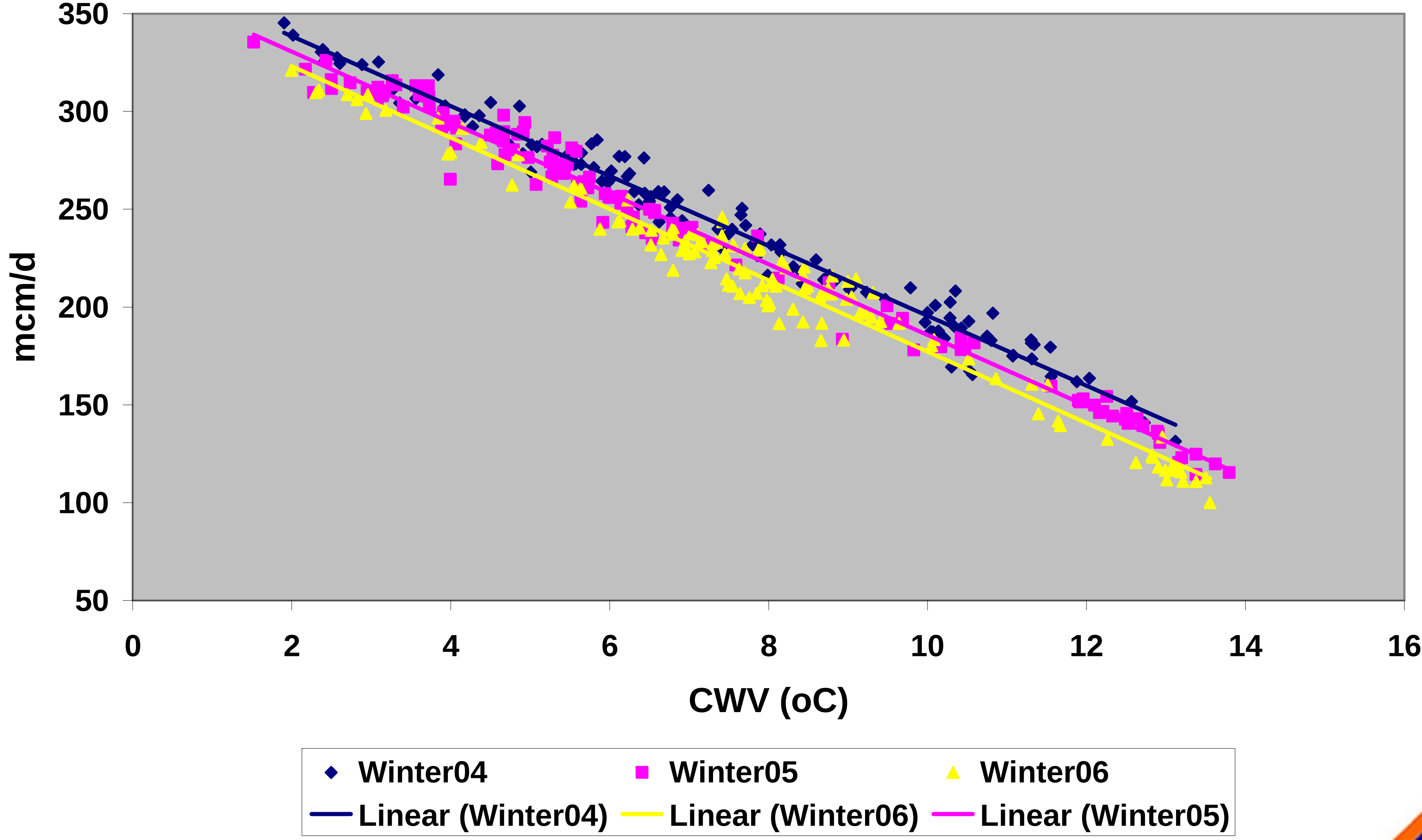
Is this why IUK exports to the Continent have declined?



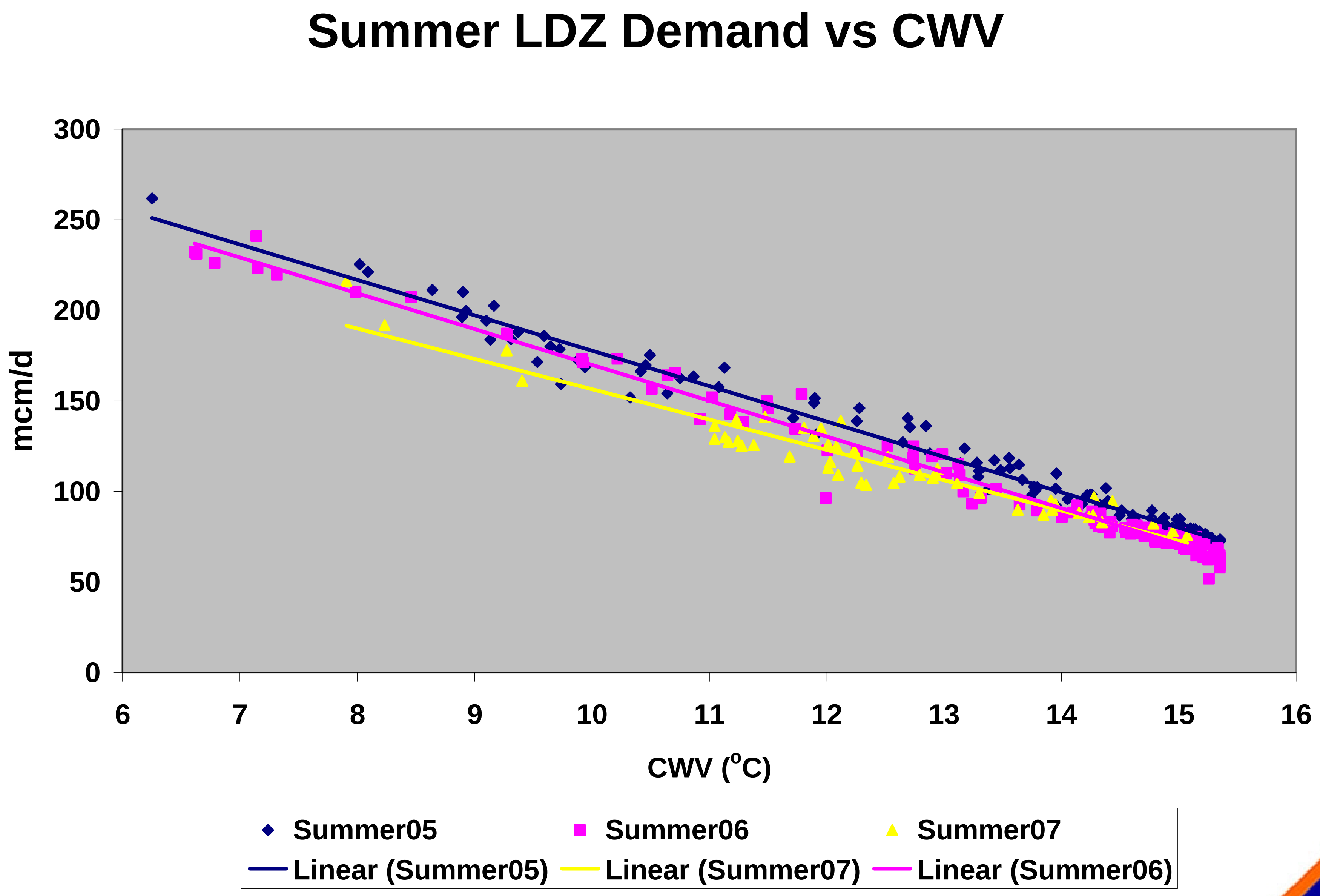
We have seen substantially higher exports than last year during March/April despite low Continental storage utilisation – but exports have declined during June despite prices being fairly flat.

There has been an underlying decline in LDZ Demand

Winter LDZ Demand vs CWV



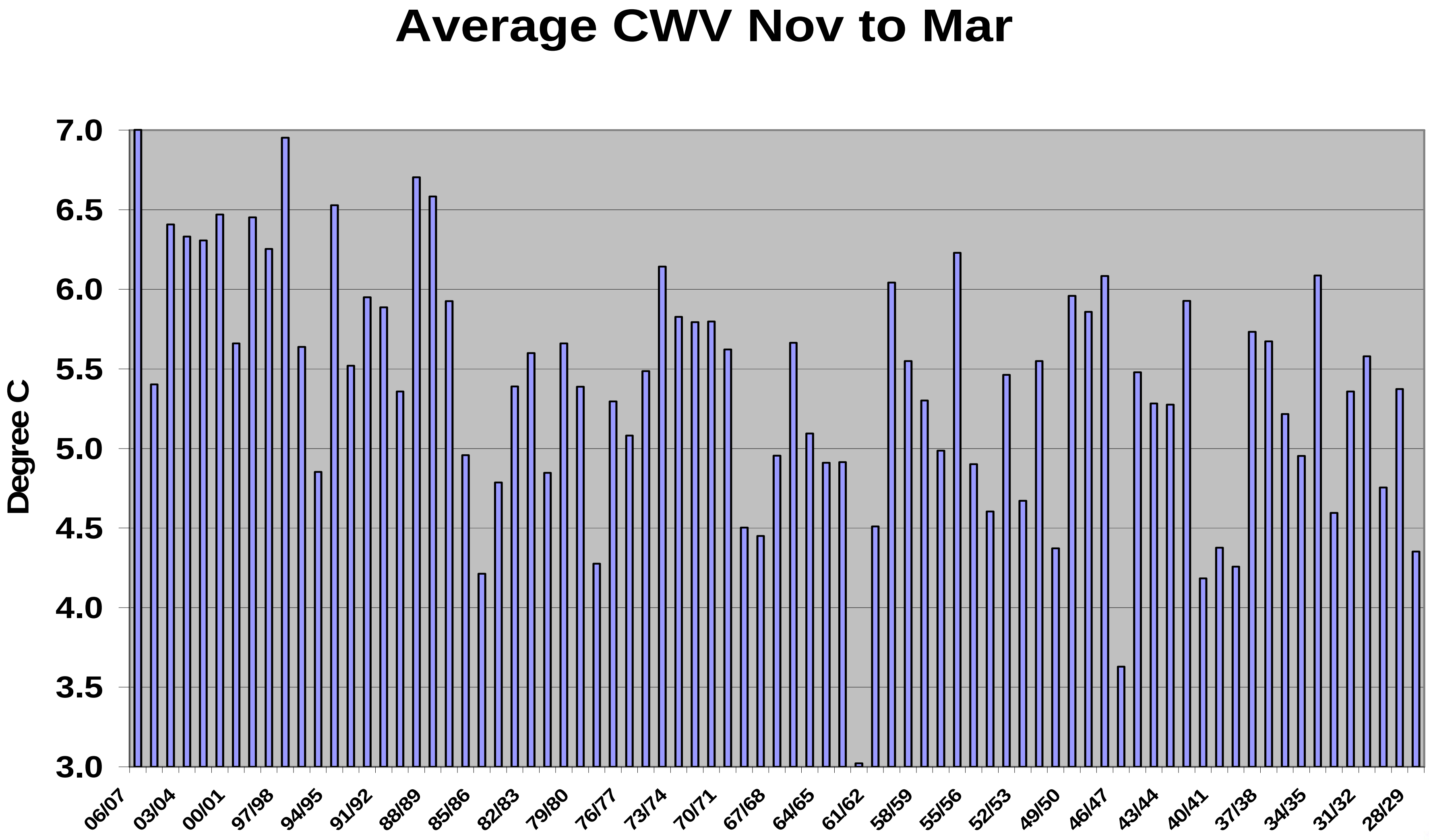
This is also evident in the Summer



Our expectation is <u>no</u> net growth in LDZ Demand in W 07/08

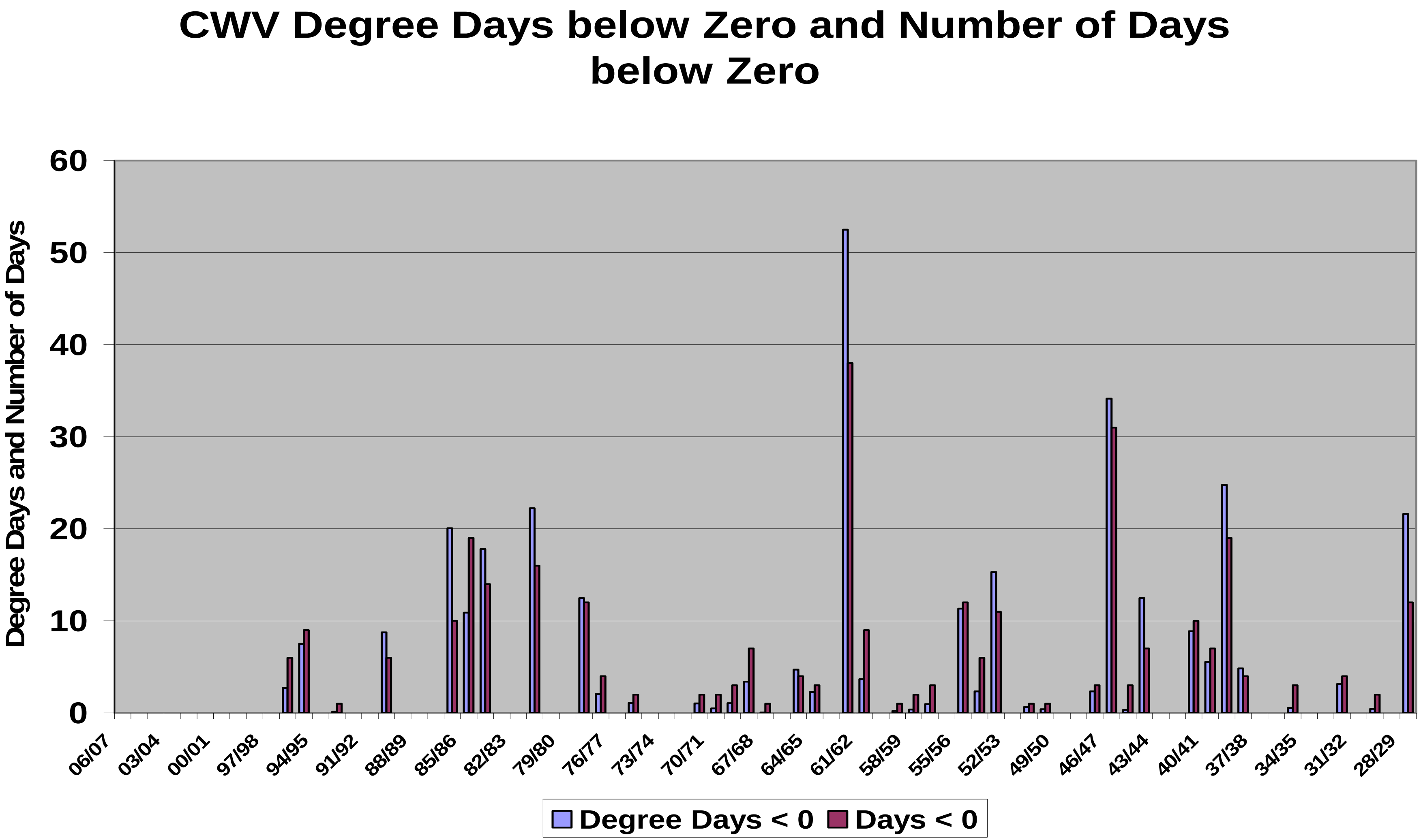
- Despite the fall in retail energy prices they are still relatively firm compared with prices 2 years ago
- Disposable income is being squeezed by other rising costs (e.g. higher interest rates)
- Having seen the financial benefits of changed behaviour to reduce energy usage we are unlikely to see a sudden change?
- There is an increasing focus on being green – reducing carbon footprints
- Insulation measures (loft, cavity wall) are being subsidised
- The penetration of condensing boilers is increasing

Average CWV is a good measure of overall winter severity



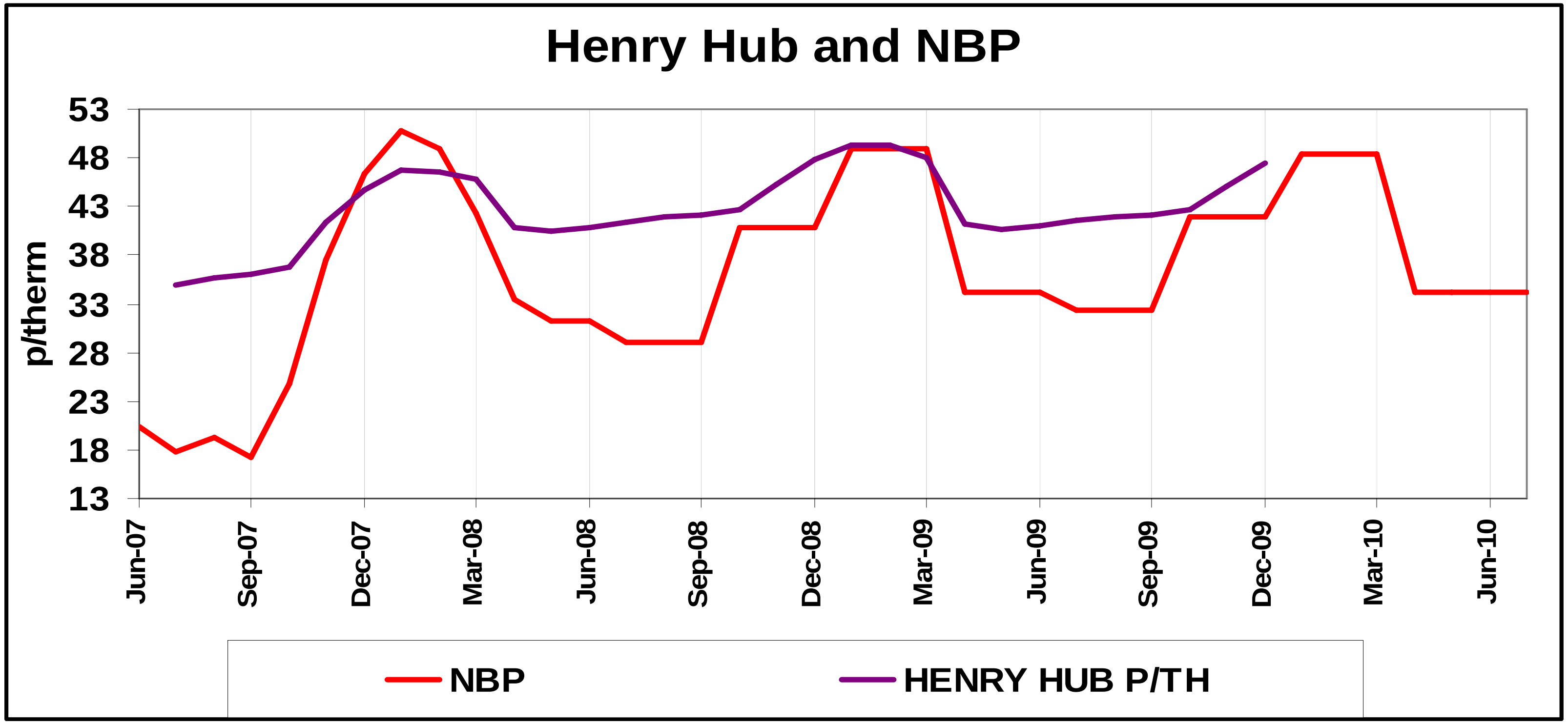
The 11 mildest winters in the last 79 years have all occurred in the last 20 years
The coldest winter in the last 20 years was circa 1 in 4 on a 79 year basis (95/6)
The most recent of the coldest 10 winters since 28/29 occurred in 1985/6

Degree days below zero provides a measure of shorter period severity



In the last 10 winters there have been no CWVs below zero – a gap of 3 was the previous maximum Against this historic data, NG's examples of a cold week (28 degree days below zero) and a cold month (60 degree days below zero) look particularly extreme.

Current HH vs NBP Prices favour Europe for flexible LNG Cargoes for Dec 07 to Feb 08



Assuming Ormen Lange on stream, no major Producer outages and weather that is seasonal to mild, we could envisage lower NBP prices and some LNG diversions from Europe to the US through this winter

However, are we likely to see Continental players diverting LNG unless they are confident of meeting their Security of Supply standards?

If cargoes are diverted to the US we still need to manage the inertia of re-diversion when cold snaps occur. This could be achieved through keeping LNG sites relatively full and using conventional storage more flexibly – recognising the ability to refill this when LNG cargoes arrive

Winter 07/08 Overview/Uncertainties

Bearish Factors / Events

- Ormen Lange on stream
- LDZ underlying demand unlikely to increase vs 06/07
- Weather more likely to be consistent with last 10 to 20 years (rather than last 79 years)
- Strong Norwegian/Dutch production insensitive to price
- Dragon/South Hook infrastructure in place and soft US prices
- Storage fill ahead of schedule

Bullish Factors / Events

- Ormen Lange delayed
- LNG diversion through high US prices
- Severe weather across Europe
- NCS production outages or UK/European supply disruptions
- Increased demand for power generation (in particular Q1 08 with Phase 2 Carbon)
- Dragon/South Hook Infrastructure delayed
- Network constraints?