



Proud Partner

# CCGT in the UK Today

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# Current State of the Market

## Challenges:

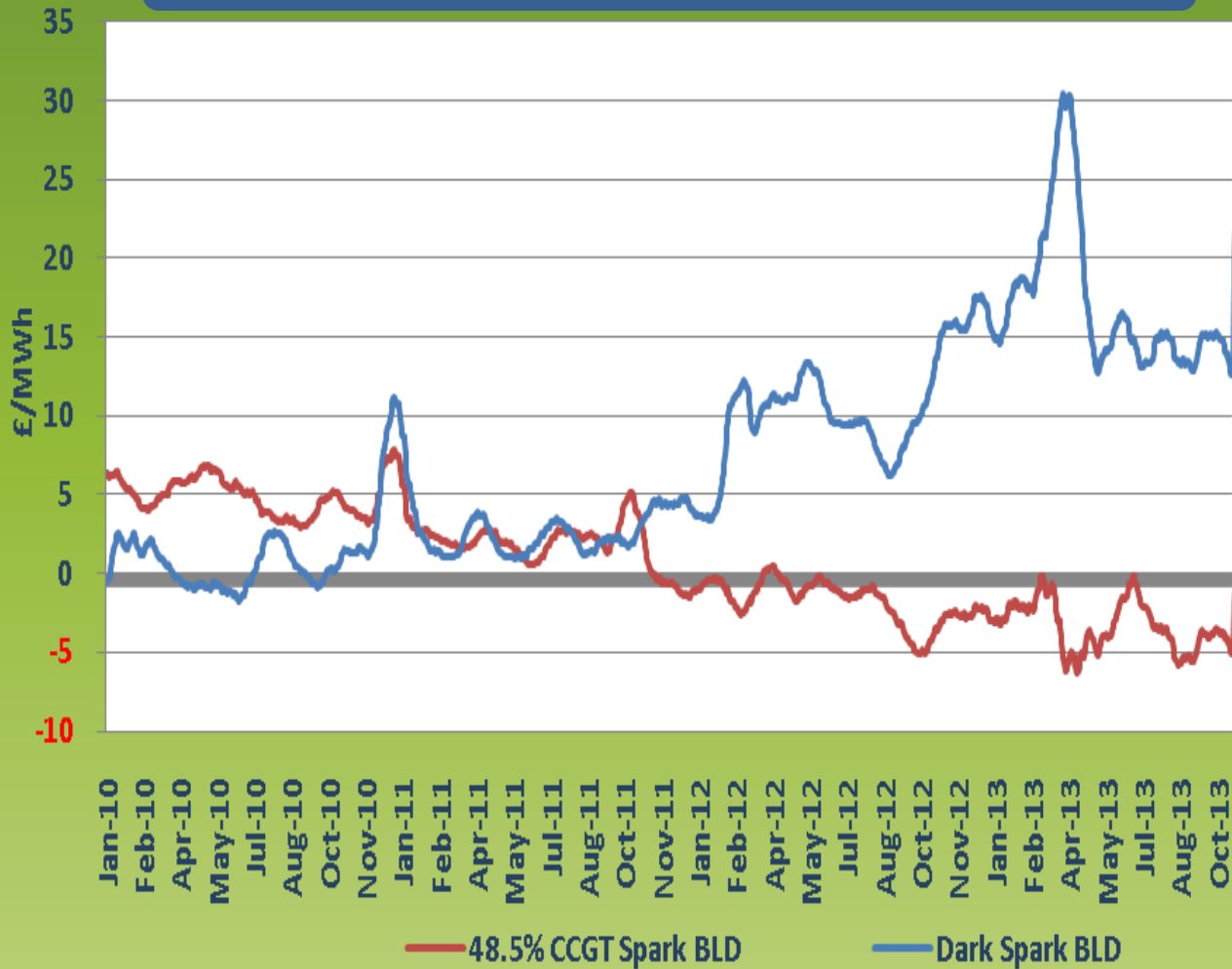
- Security of supply
  - Decarbonisation
  - Affordability
- 
- **Need for new development**
  - **Secure longevity of existing CCGTs**

Electricity Market Reform aims to achieve climate and energy goals.



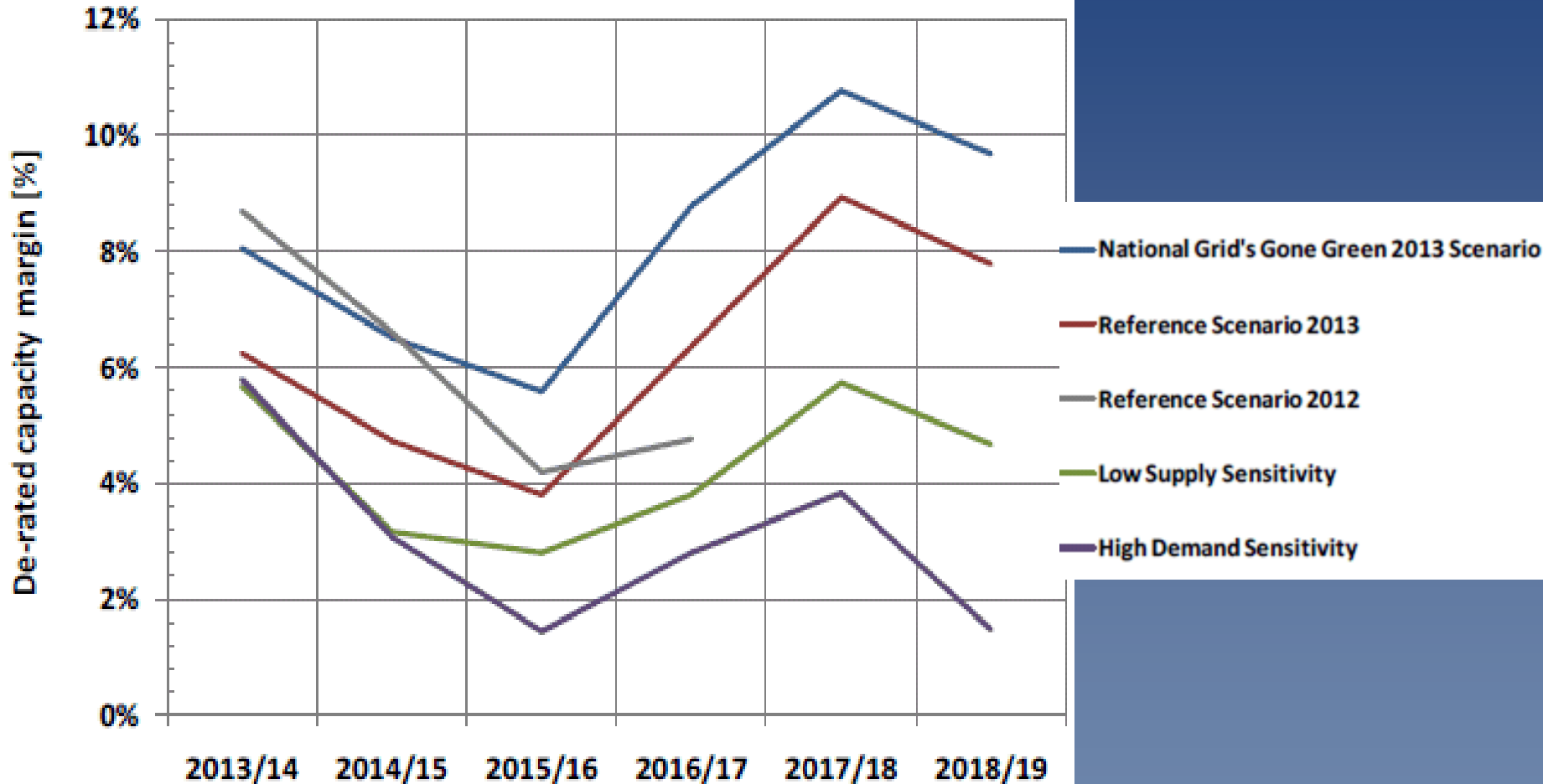
# Sparks and Darks Outturns

30-day Moving Average Spark and Dark Outturns



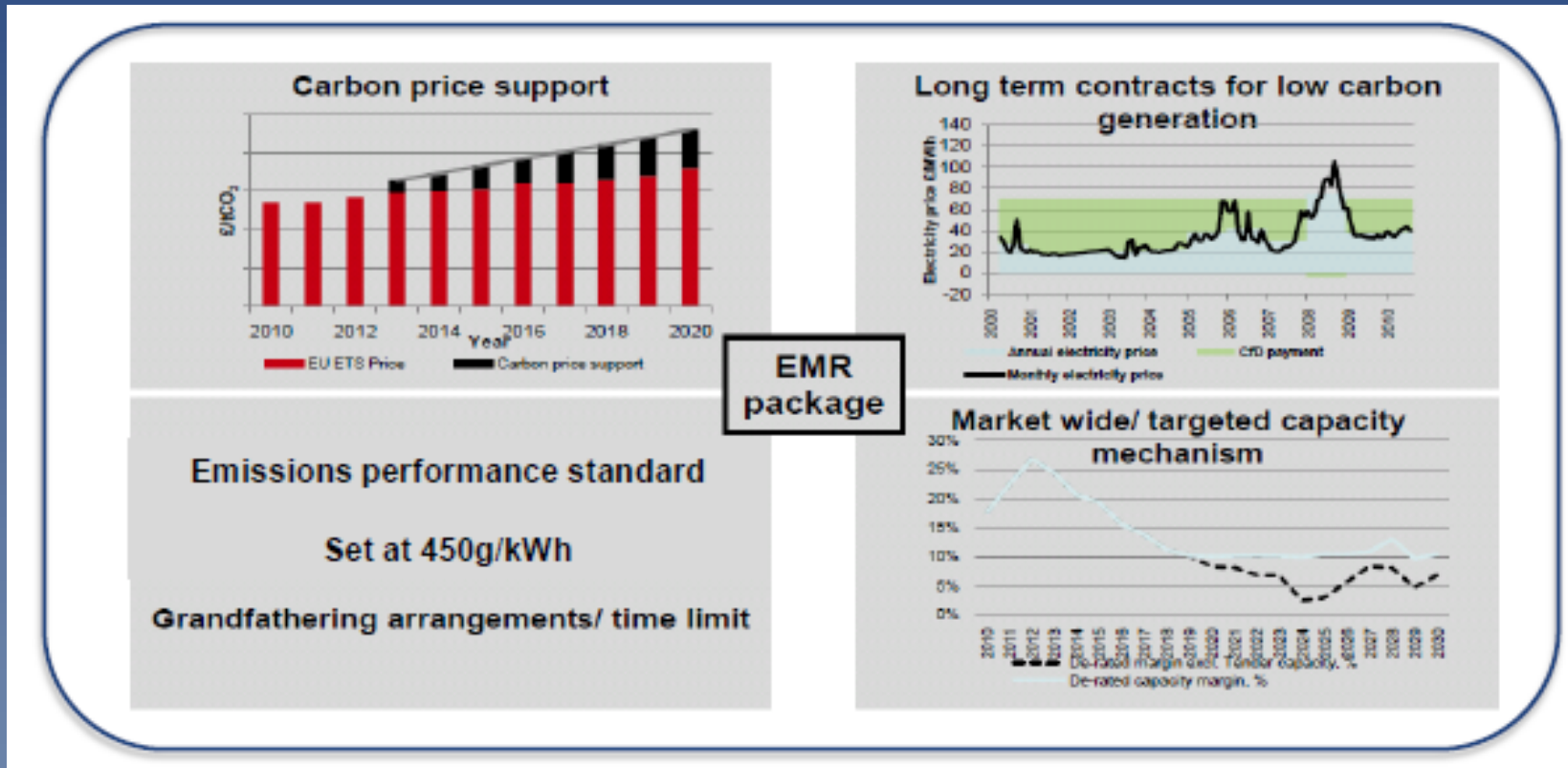
# Views on Capacity Margin

Ofgem Capacity Assessment 2013 comparing Ofgem scenarios to National Grid 2013 Gone Green Scenario

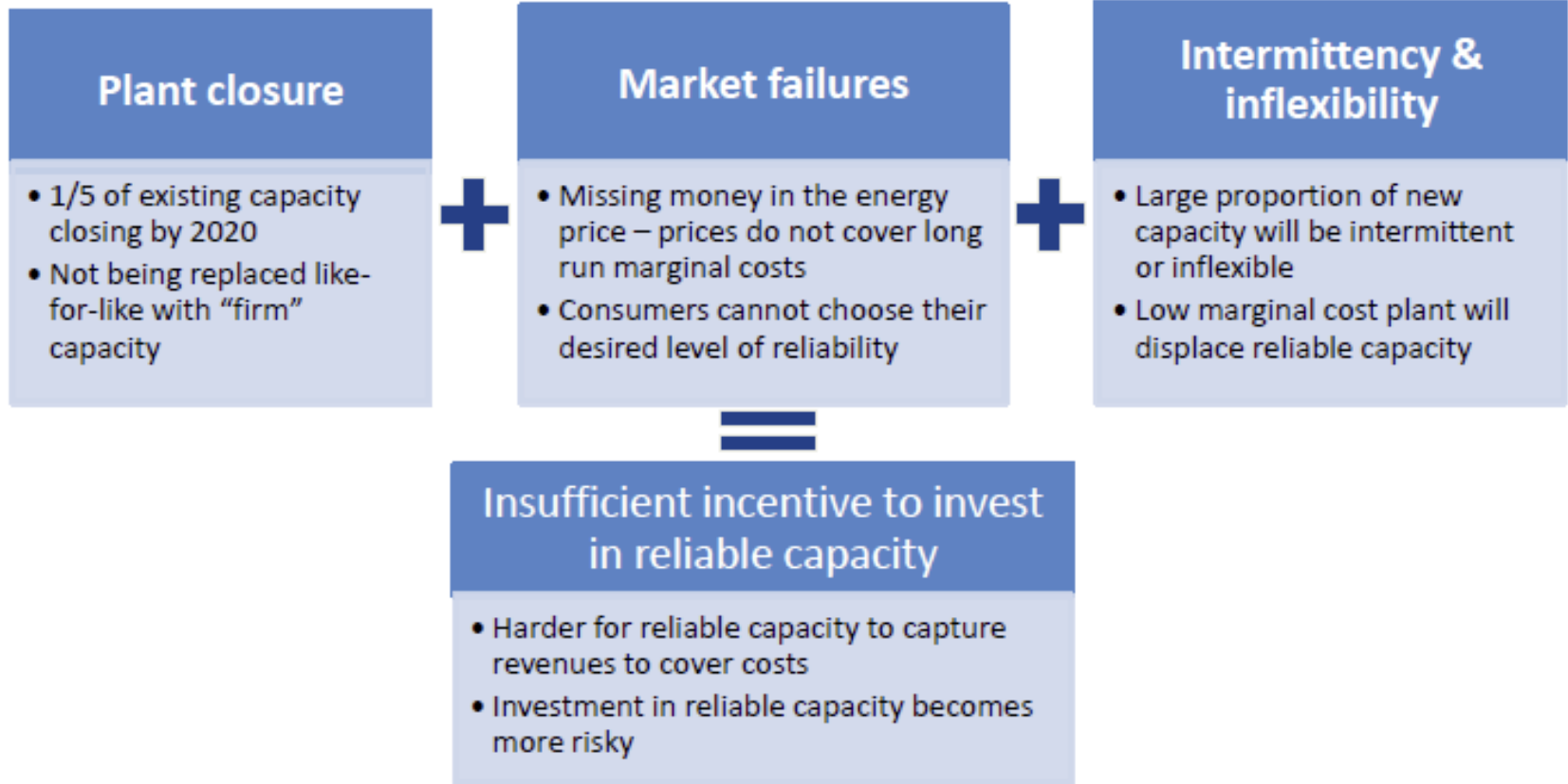


# Electricity Market Reform

*a package of reforms designed to bring forward investment in low carbon and ensure security of supply at least cost to consumers*



# Electricity Market Reform



Capacity payments offer a regular revenue stream for capacity providers in addition to energy market earnings – facilitates investment by decreasing the revenue risk.

# What Does this Mean for CCGT

## Capacity mechanism

- Investors take regulatory rather than market risk

## Fall in wholesale prices

- Money moves from the energy to the capacity market

## Within-day value increases

- Maximise additional revenue opportunities at short timescales.

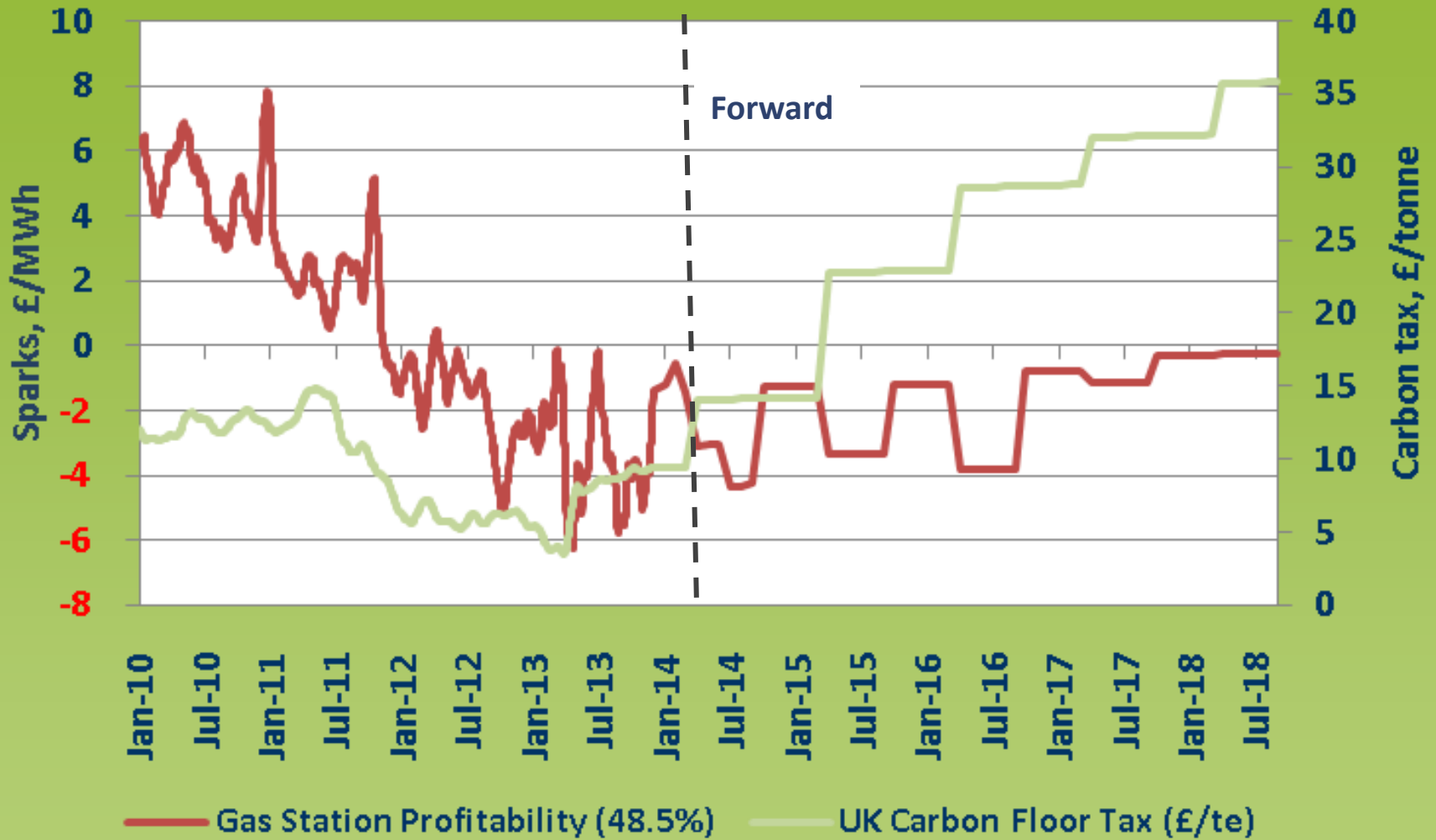
## Increase in renewables means overall capacity is increasing

- Derated capacity margin

New CCGTs will have to make their return over less running hours and at a lower average price



# Forward Sparks

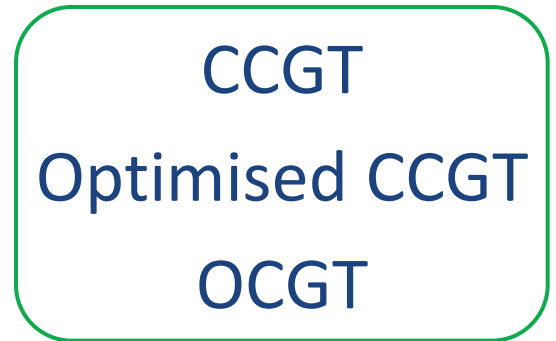




# Configuration Options

Operational flexibility comprises:

- Fast start-up and shutdown
- Fast load ramps
- High start-up reliability
- Frequency control and ancillary services



Improved control of GT exhaust temperature would have an impact on flexibility of CCGTs...but requires investment.



**Thank you**

