



**Scottish and Southern
Energy**

Natural Gas – the Natural Solution?

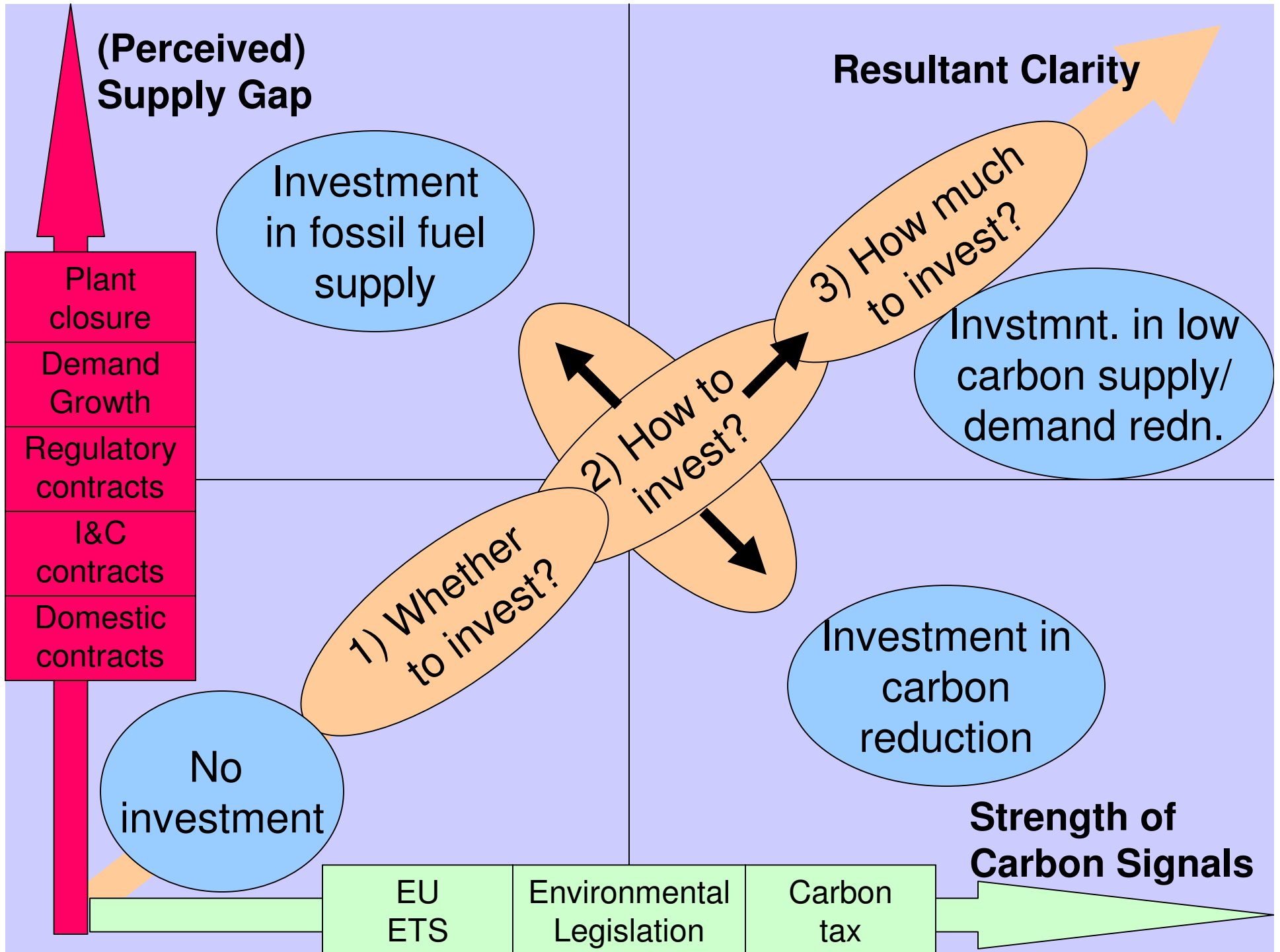
May 2006

All Energy



Factors Determining Investment

- The generation gap
 - continued demand growth
 - plant closure
 - estimated requirement of 20 – 40 GW by 2020
 - “easy” projects in the system only 5 GW (gas)
- Climate change
 - carbon price
 - regulatory measures

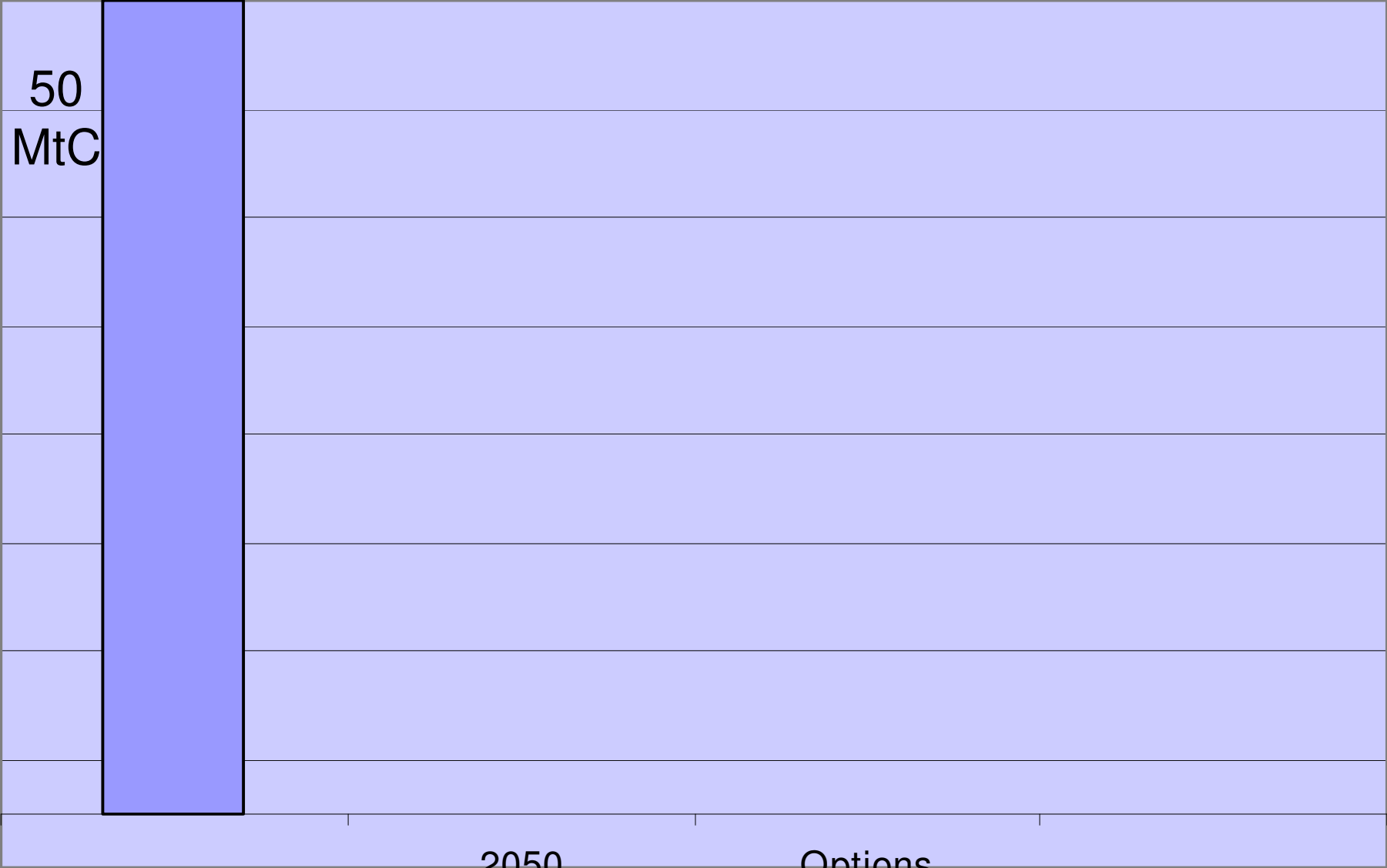




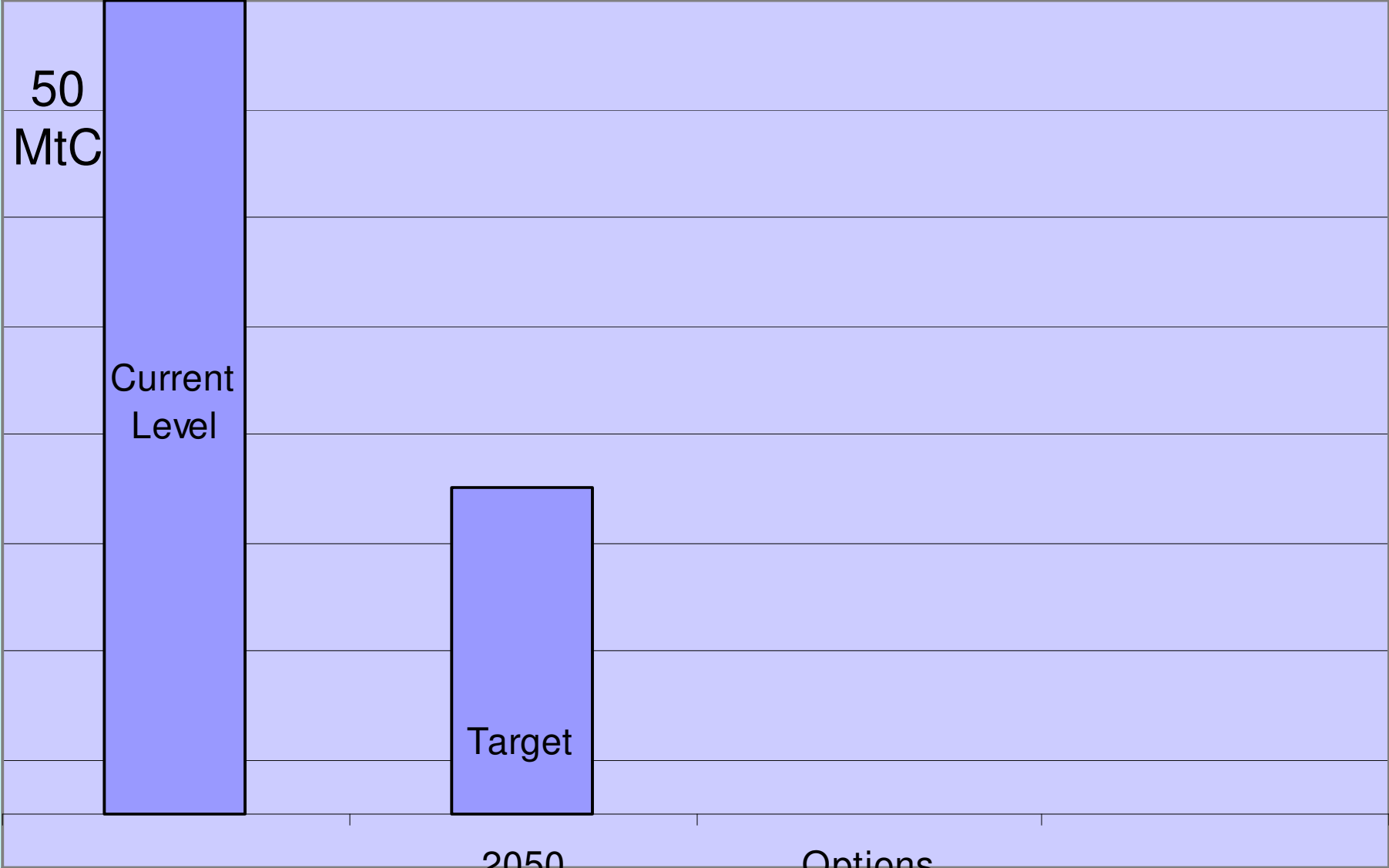
Benefits of Gas Generation

- Can be built quickly
- Low(est) capital costs
- Flexible - base or peak load
- Facilitates zero carbon generation
- Proven technical and economic track record
- Lowers emissions when replacing traditional coal and oil plant

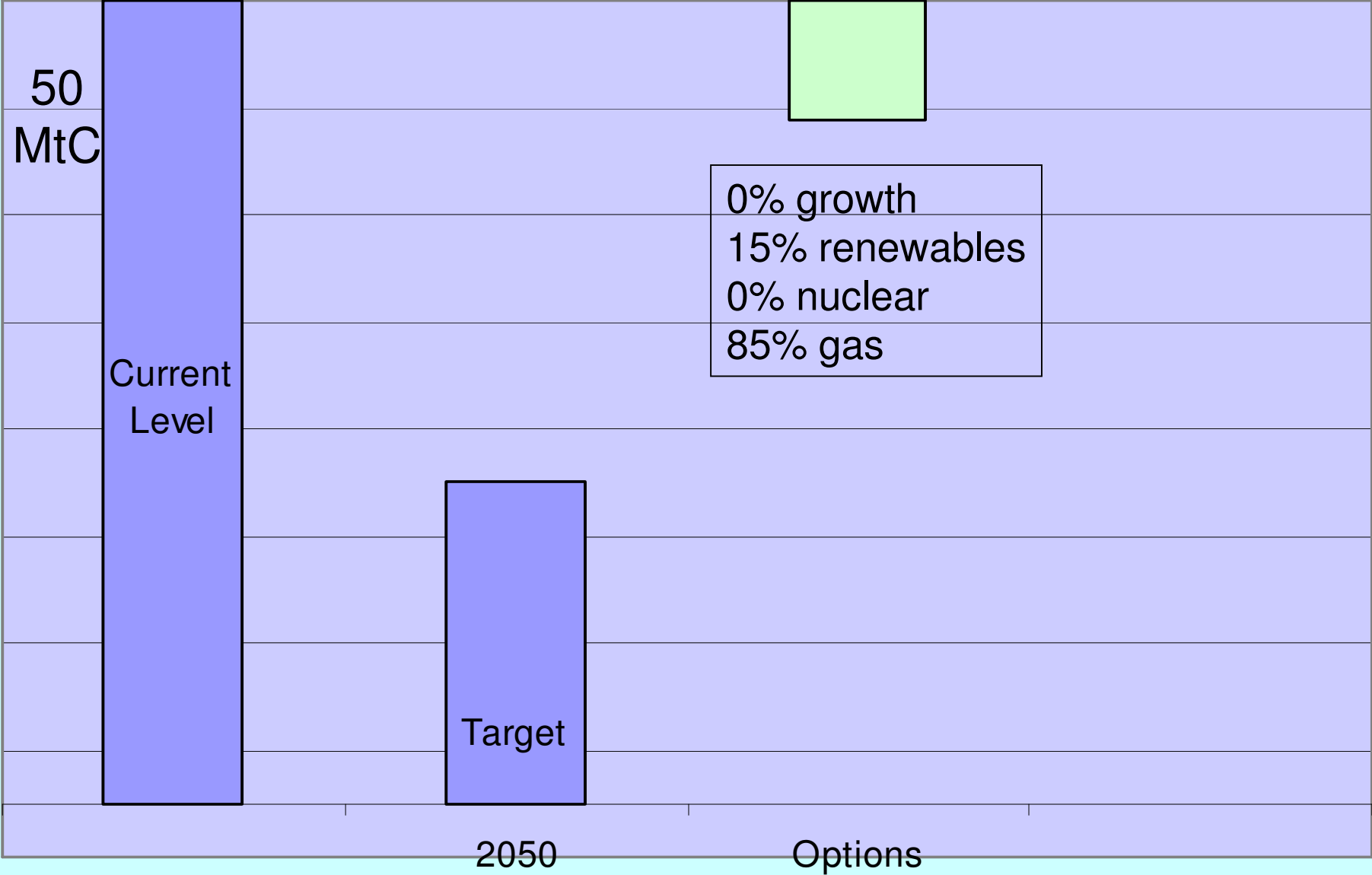
Electricity Emissions



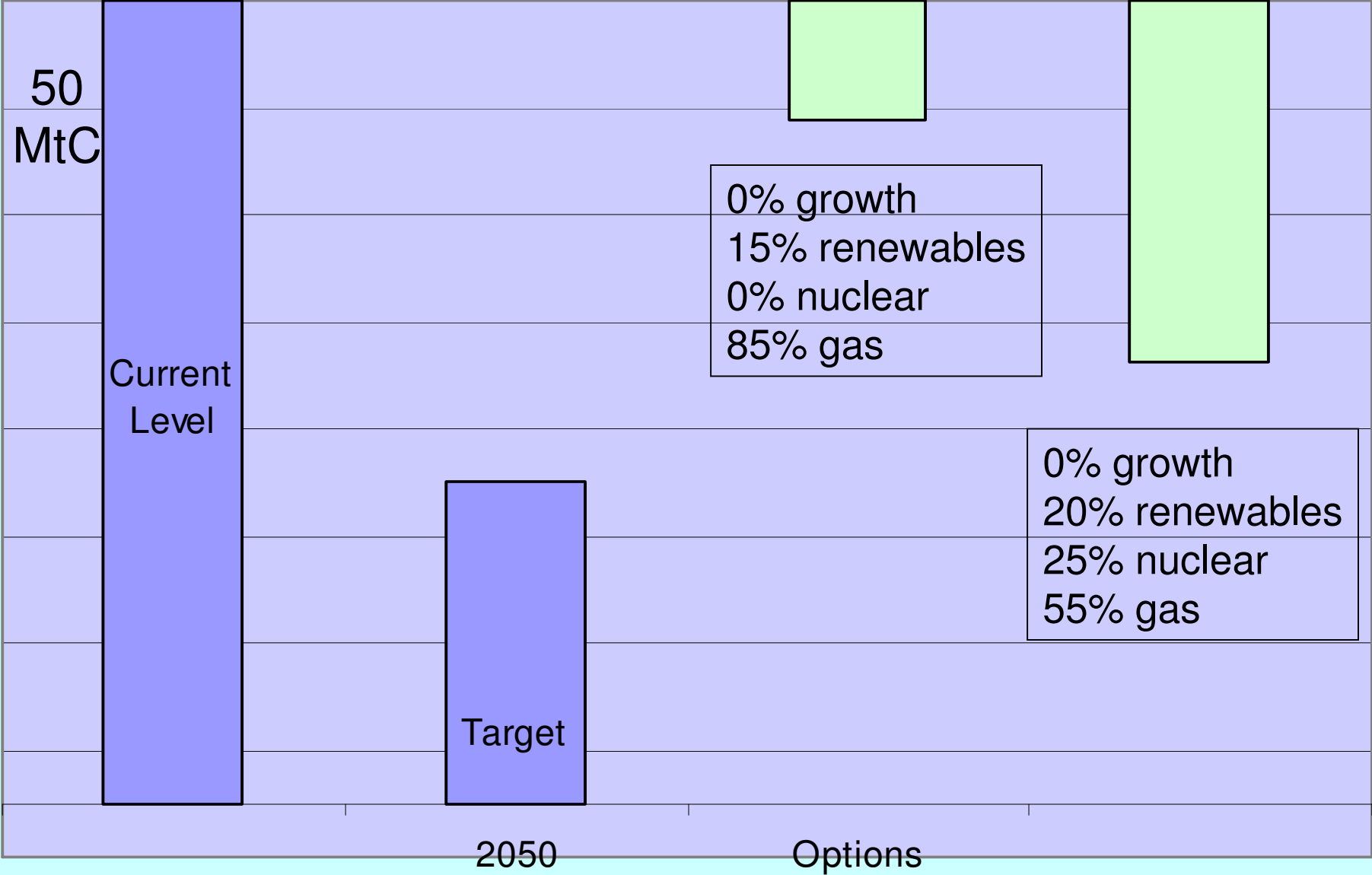
Electricity Emissions



Electricity Emissions



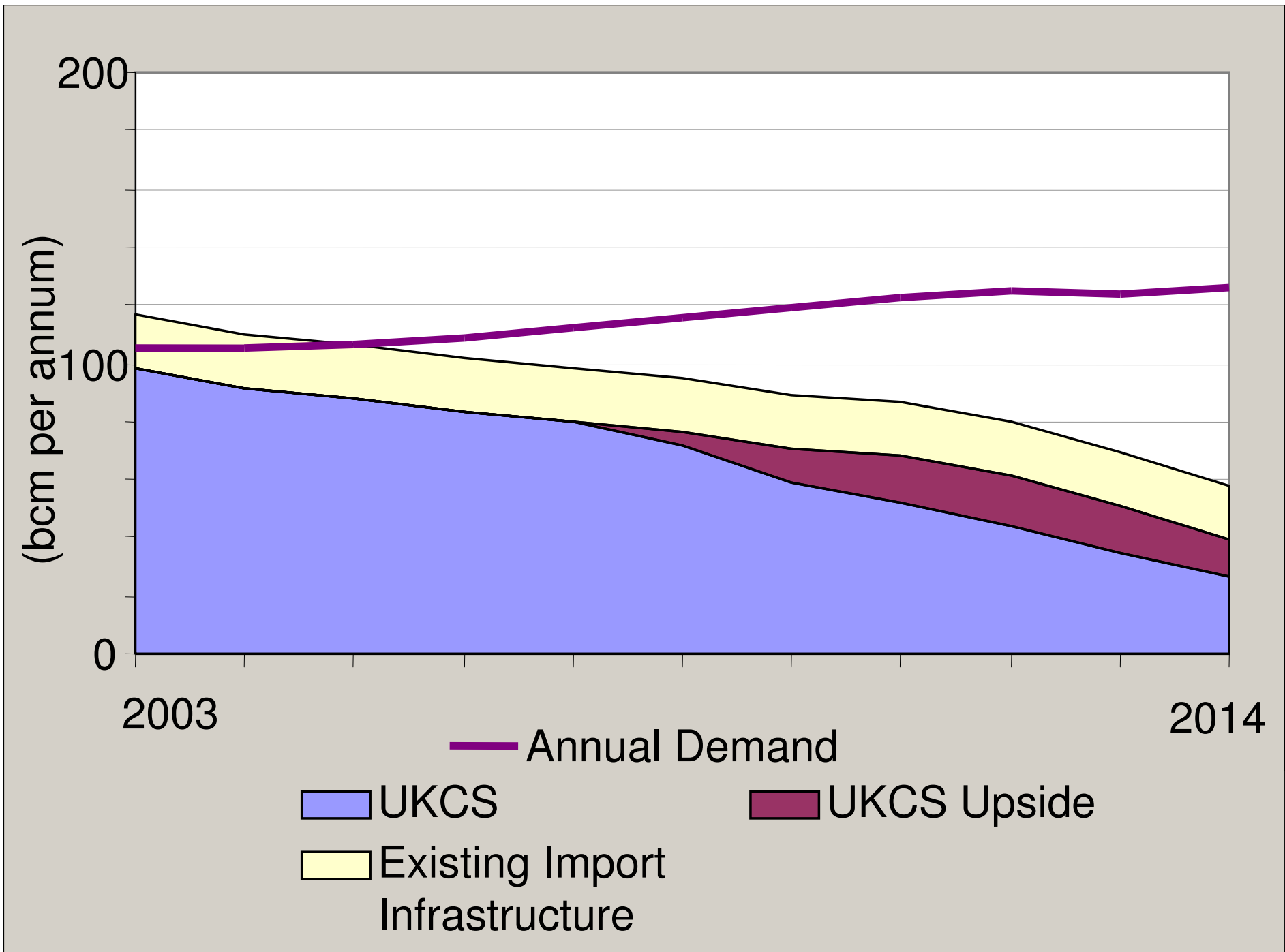
Electricity Emissions





Concerns About Gas

- Over dependence
- Price risk
- Supply risk
 - Increased reliance on imports
 - Political instability
- It's running out!





UK Supply & Demand Position

- UKCS declining
- Interconnector projects are underway to address this
- Sufficient interconnector capacity will be available to provide a surplus in the UK
- BUT tight again next winter



LNG Supply & Demand

- Demand for LNG will increase
- Supply & shipping expected to keep pace
- Widens geographical spread of supply
- Important alternative and supplement to pipeline gas from Europe

Overview of supply-demand outlook to 2014/15 (Indicative numbers)

Demand:

increasing from 100 to 120 bcm

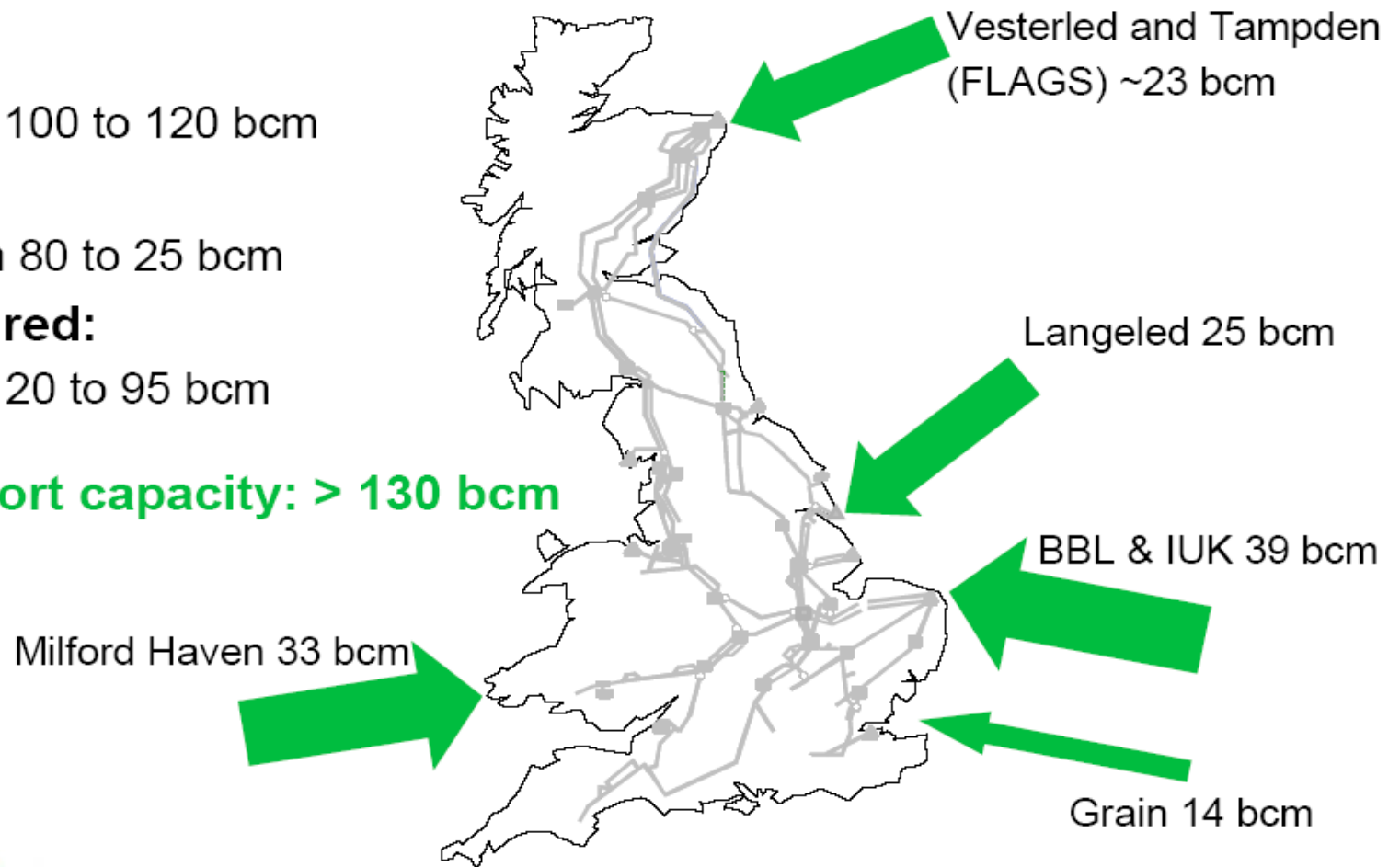
UKCS:

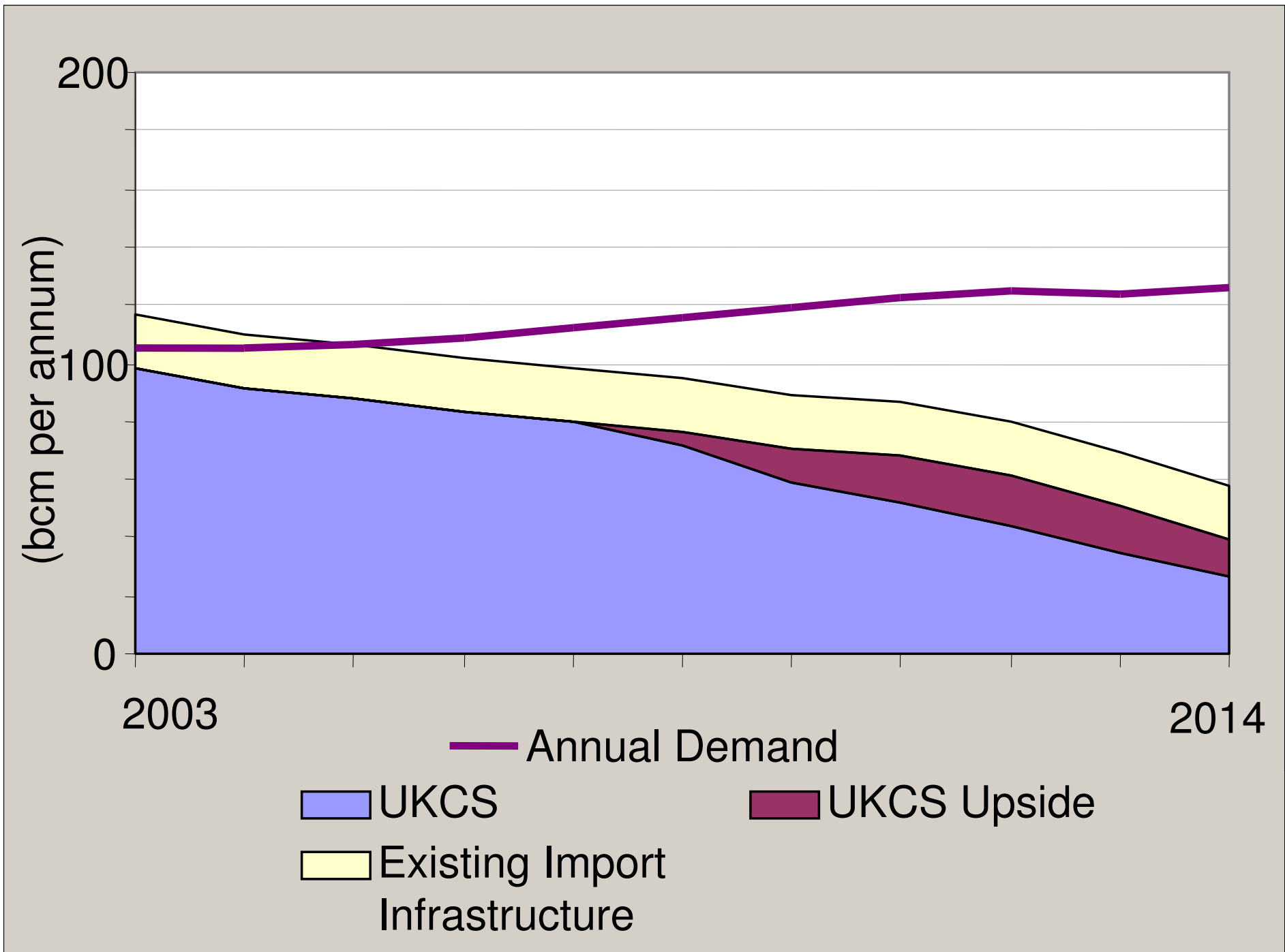
decreasing from 80 to 25 bcm

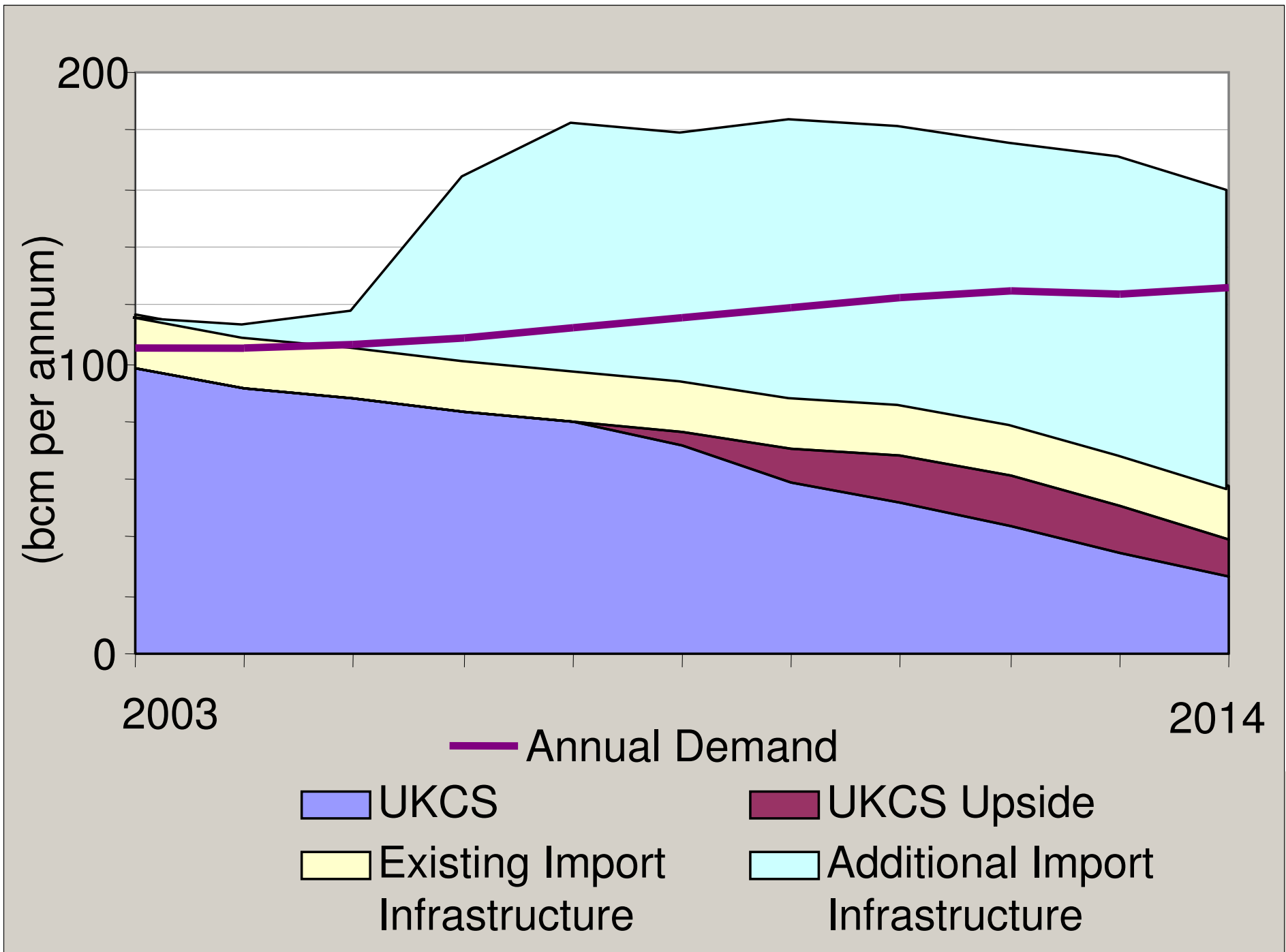
Imports required:

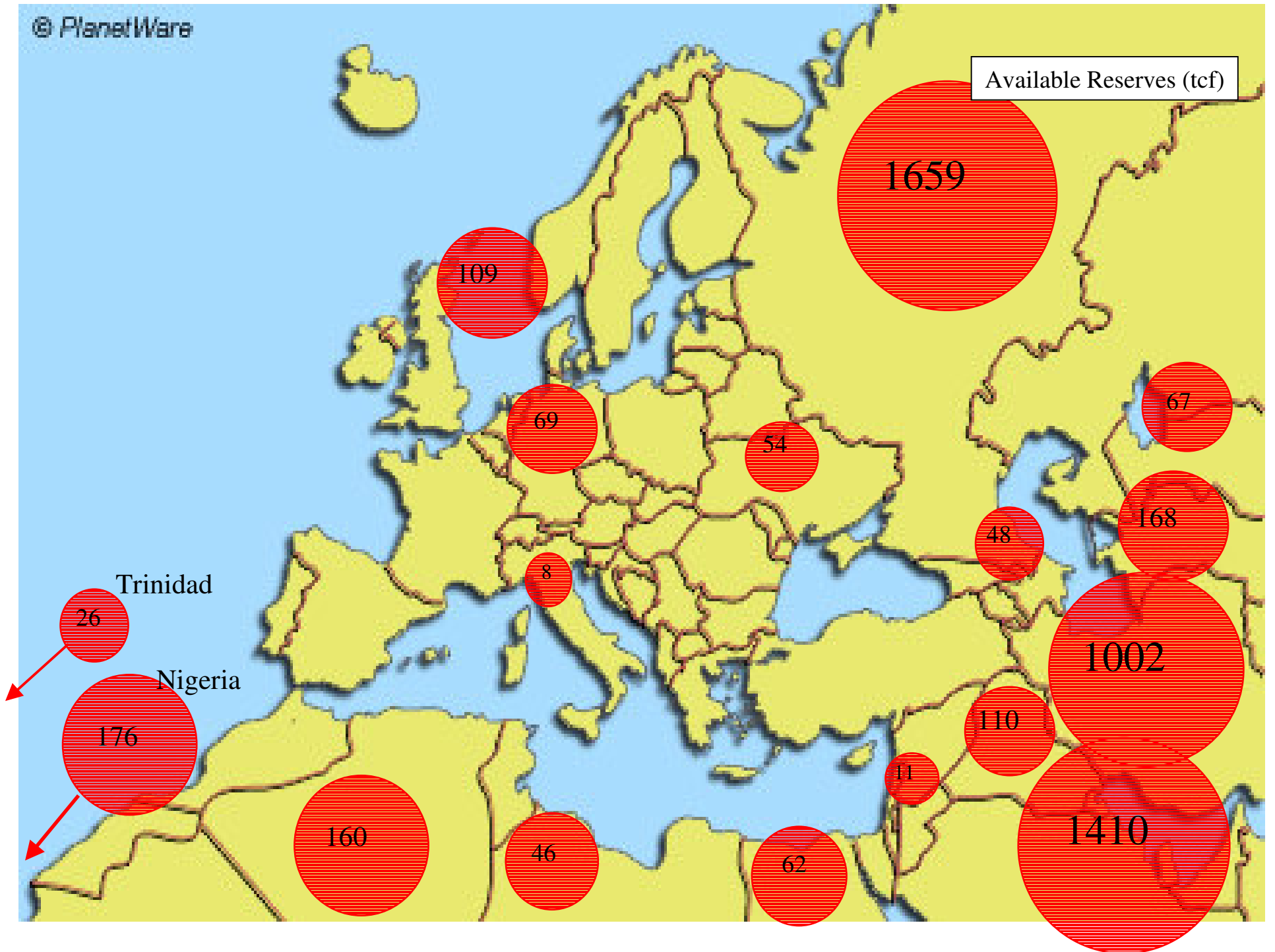
Increasing from 20 to 95 bcm

Potential import capacity: > 130 bcm

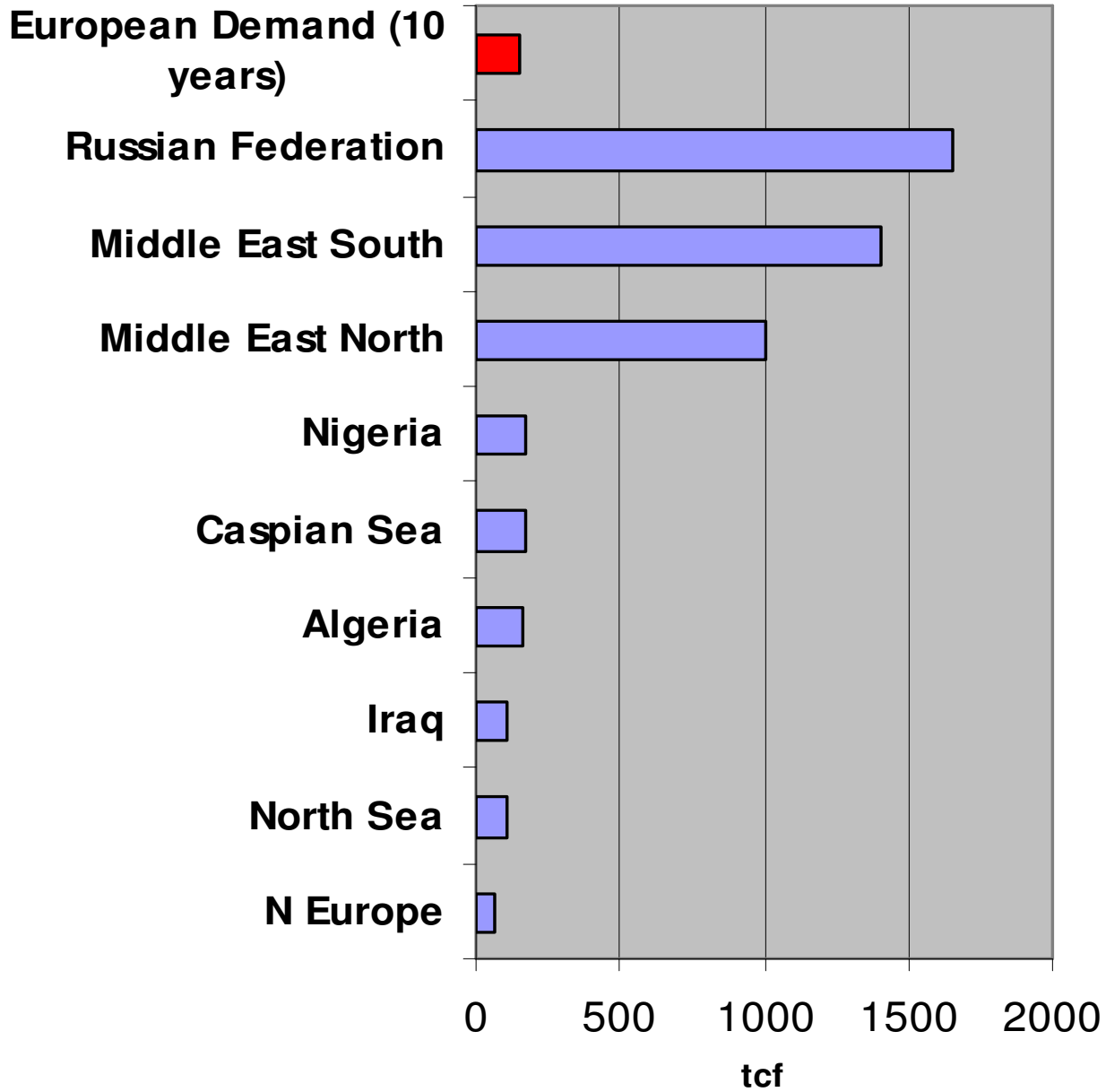








Relative Size of Reserves





Conclusions

- No shortage of gas (in medium term)
- Supplies are increasingly diverse in
 - Type
 - Geography
 - Politics
- Diversity helps to keep price under control
- Still important to secure not only physical infrastructure but also unfettered access to it



Conclusions

- Gas should form part of our generation mix
- Only significant, short term capacity bridge
 - build up of renewables
 - development of low/zero carbon technology (CCS)
- Ideal balance for variability
- Keeps electricity affordable
- Helps reduce emissions
- Keeps the lights on