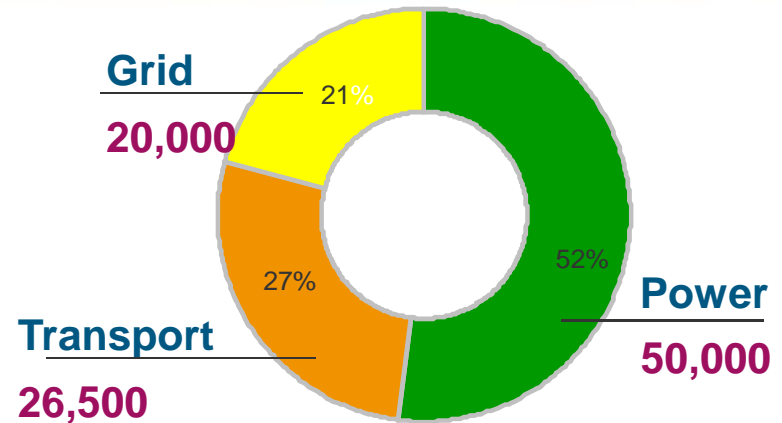
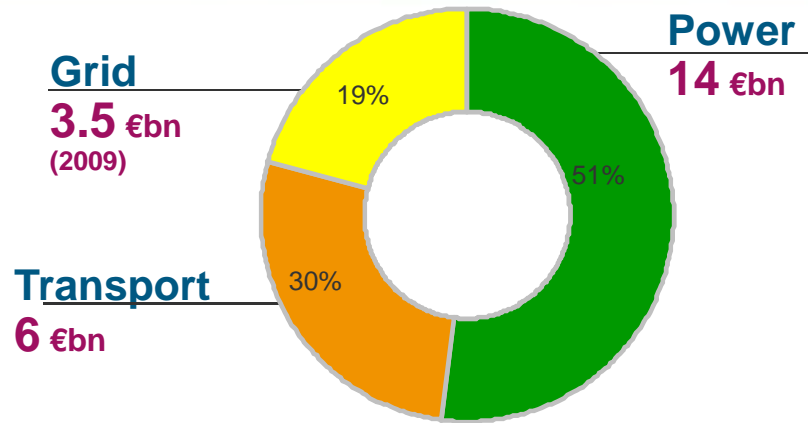


Linkage: regional focus A technology providers perspective

Helle Juhler-Verdoner
VP Global Affairs, Alstom Power

Alstom Group: Three sectors



Sales by Sector (proforma figures)

Employees by Sector

Source: Alstom 2008/09

Rail transport infrastructure



Supplied 25% of metro/trams globally

Power generation infrastructure



Major supplier in 25% of worldwide installed base

Power transmission infrastructure



Leadership in key markets and fast-growing technologies

World leader in power generation infrastructure

Alstom supplies major equipment in 25% of the worldwide installed power generation capacity



Global leader
in integrated
power plants



Global leader
in air quality
control systems



Global leader
in services for
electricity utilities



Global leader
in hydro power

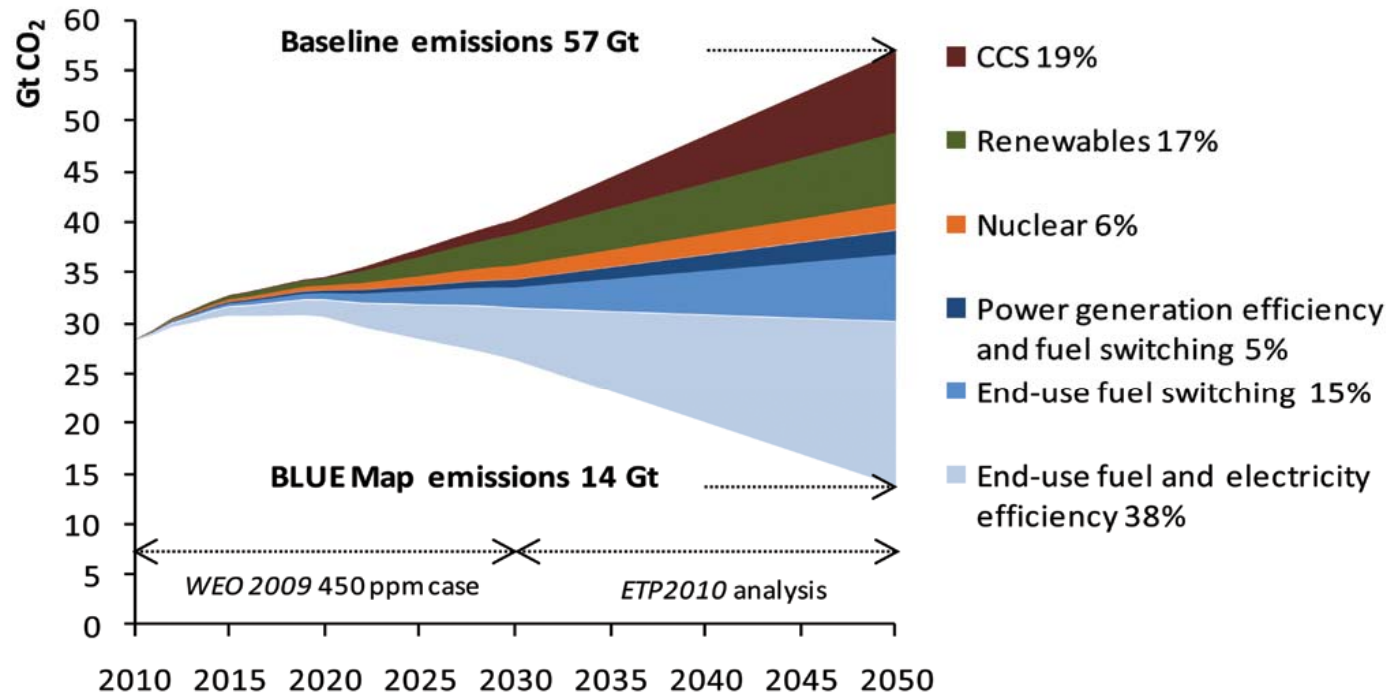
ALSTOM 'CLEAN POWER TODAY'

Alstom Power:

- ✓ has a strategy based on providing 'Clean Power Today'
- ✓ supports the 2 degrees target
- ✓ invests heavily in the development and deployment of:
 - ⊙✓ Energy efficient fossil fuel plants
 - ⊙ Renewable technologies (hydro, wind and tidal)
 - ⊙✓ Carbon capture and storage

Providing solutions for customers to face their needs – including the climate change challenge

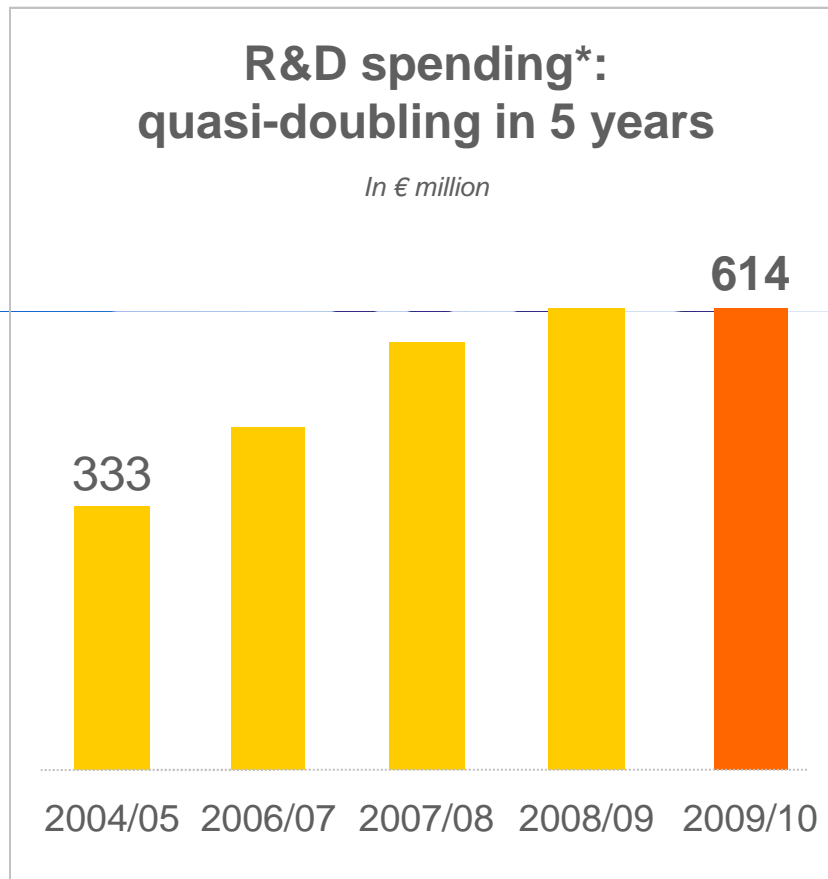
Scale of the climate change challenge - the need for all technologies



Source: IEA Energy Technology Perspectives 2010

A wide range of technologies necessary to cut energy-related CO₂ emissions substantially

Continued Alstom focus on technology and innovation



* Not including Alstom Grid figures

Power

- Improvement of power plant efficiency and flexibility
- Carbon Capture and Storage
- Renewables: extended range of onshore turbines; ocean energy, integration of renewables with pumped storage

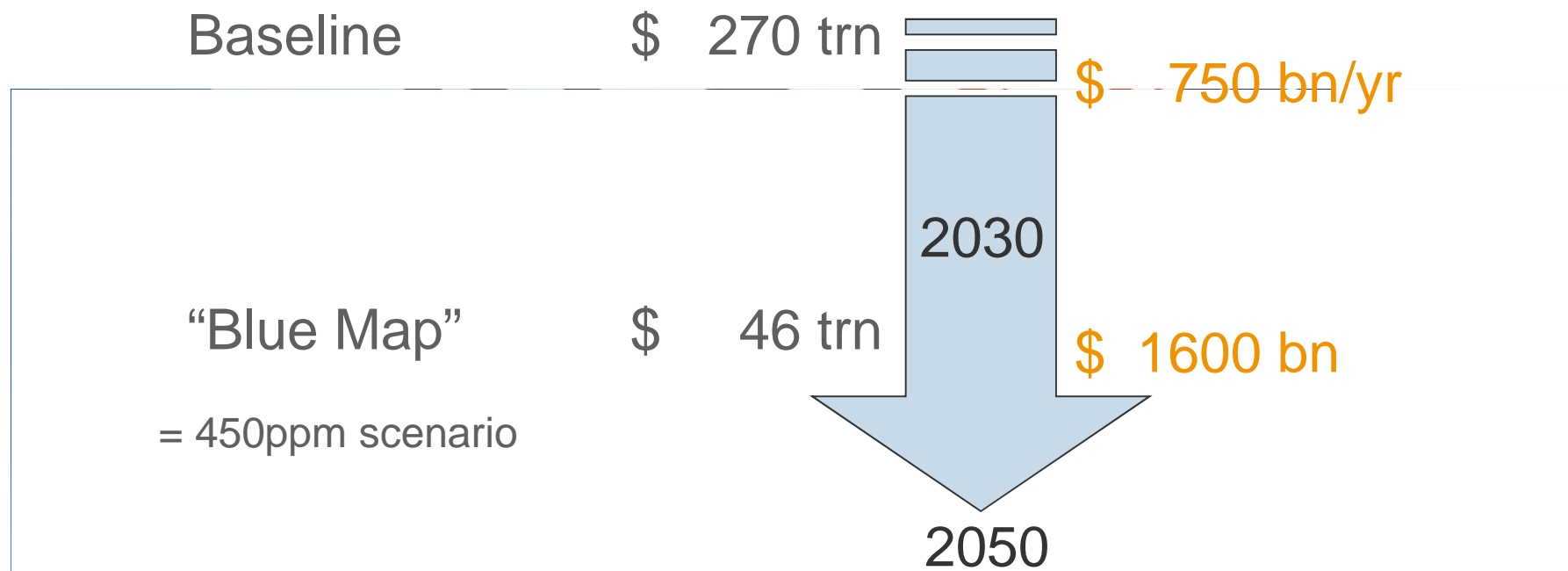


Transport

- Validation of AGV and Prima II locomotive
- New tram train
- Signalling: development of ERTMS and CBTC



What can incentivise massive investment?

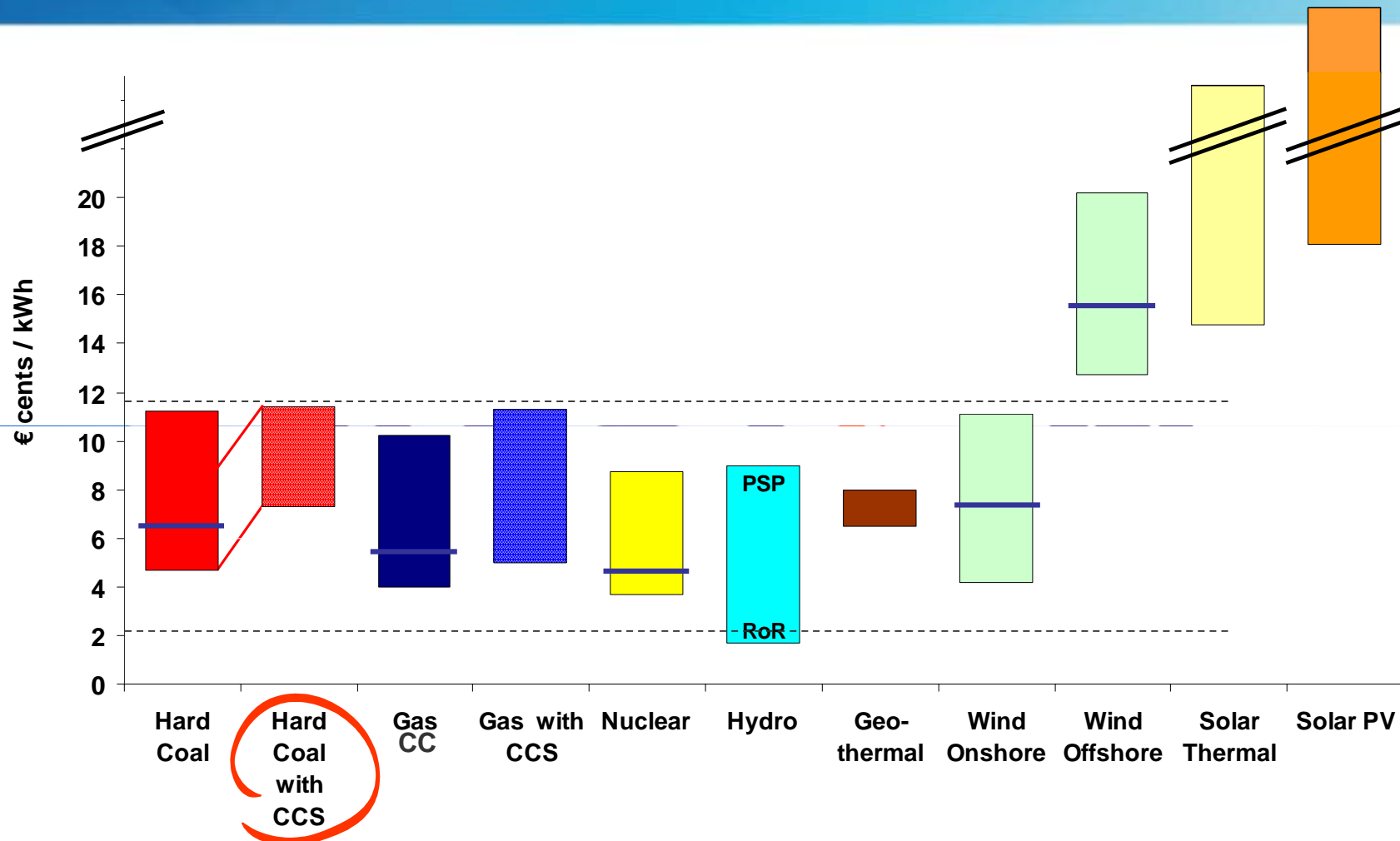


Carbon market – part of the solution

- Urgent need for global expansion of the carbon market to provide a strong and robust price on carbon emissions
- Little evidence that this will happen anytime soon

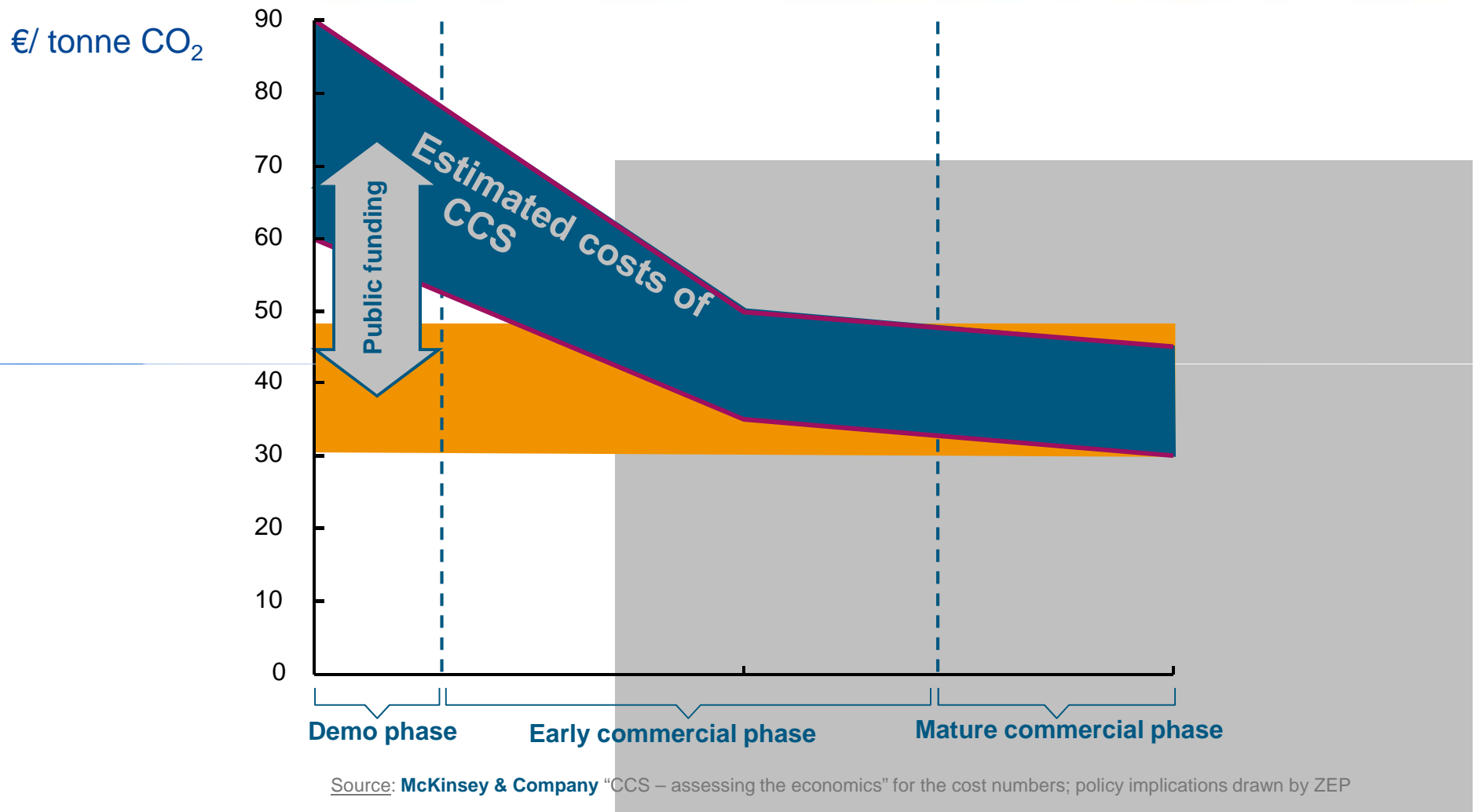
Investment decision for New PP over next 5 years

Cost of Electricity by type - Expected range



Only a very high carbon price can change this picture significantly
 Building a diversified portfolio remains the most economically safe option

Economics of Carbon Capture and Storage



Conclusion

- A strong price on carbon through a global cap-and-trade system will incentivise low-carbon investments – but development is longer term
- More regional developments can drive the development— creating an opportunity for global linking and creating more clarity on off-sets
- Linking of regional systems and acceptance of off-sets in regional systems will provide a price signal for technology providers and utilities to pick-up on
- The less a carbon market can deliver on incentives - the more need for alternative sources of funding and/or regulation for low- carbon investments to happen in time and at the scale needed