

# THE ROLE OF THE TECHNOLOGY PATH IN THE FUTURE CLIMATE REGIME

Henry Derwent, IETA

Comillas/BP Seminar Madrid

April 17 2008



**INTERNATIONAL EMISSIONS TRADING  
ASSOCIATION**

# The Future is Graduated

- A longer list of categories than just two undifferentiated Annexes
- Competitiveness will affect that categorisation
- Sectoral differentiation may be an outcome
- So may temporal differentiation
- The penetration of newer technologies may be key to those distinctions



# Technology is deeply rooted in the negotiations

The developed country Parties and other developed Parties included in Annex II shall take all practicable steps to promote, facilitate and finance, as appropriate, the transfer of, or access to, environmentally sound technologies and know-how to other Parties, particularly developing country Parties (Convention Art 4.5)



**INTERNATIONAL EMISSIONS TRADING  
ASSOCIATION**

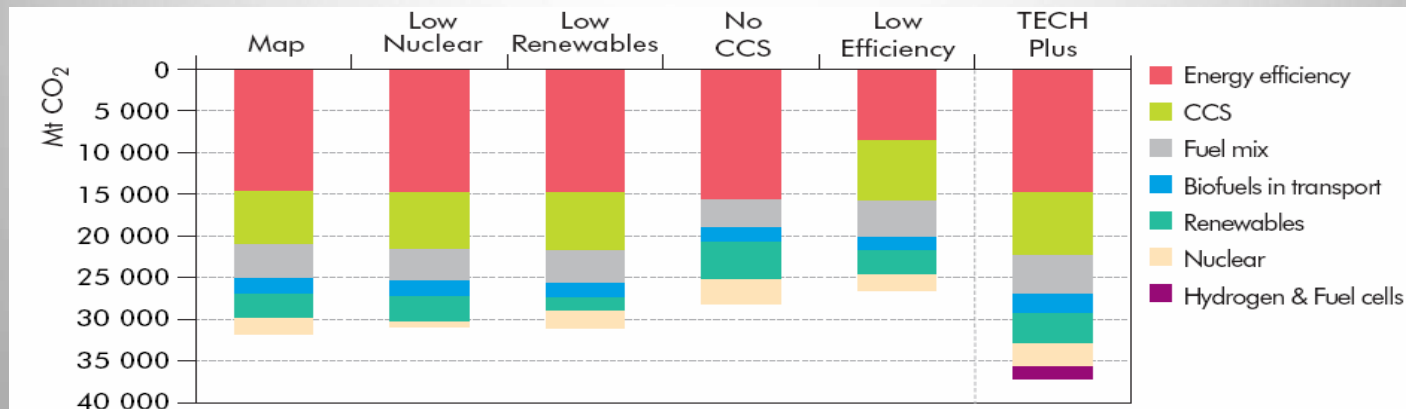
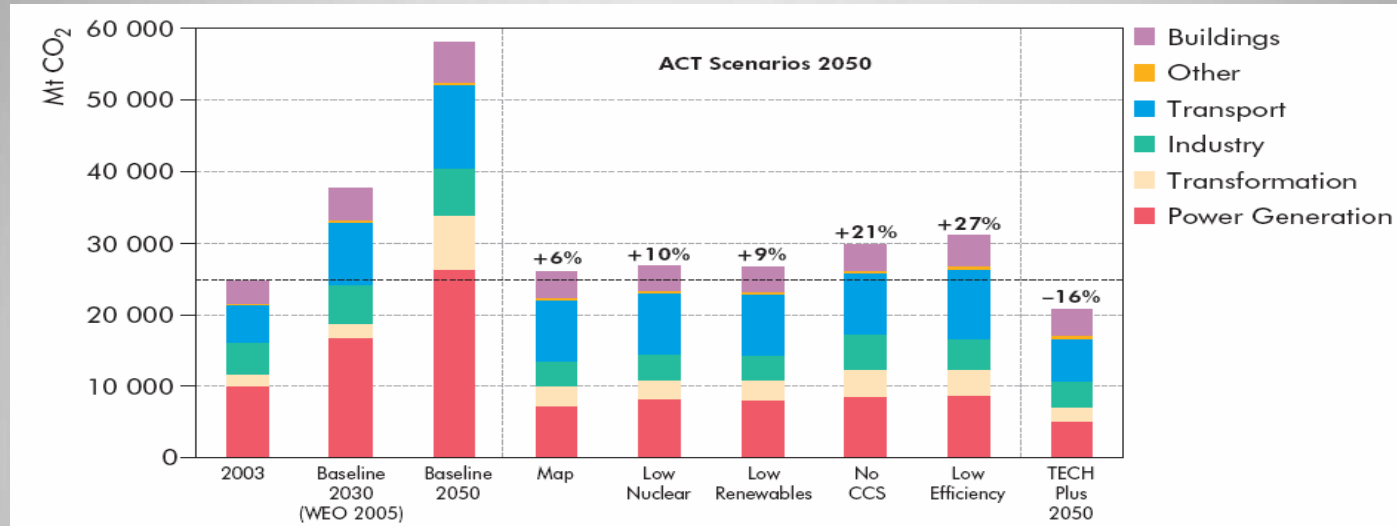
# A change of heart?

- We must all recognize that in the long run, new technologies are the key to addressing climate change. But in the short run, they can be more expensive. And that is why I believe part of any solution means reforming today's complicated mix of incentives to make the commercialization and use of new, lower emission technologies more competitive. Today we have different incentives for different technologies -- from nuclear power, to clean coal, to wind and solar energy. What we need to do is consolidate them into a single, expanded program with the following features.
- First, the incentive should be carbon-weighted to make lower emission power sources less expensive relative to higher emissions sources -- and it should take into account our nation's energy security needs.
- Second, the incentive should be technology-neutral because the government should not be picking winners and losers in this emerging market.
- Third, the incentive should be long-lasting. It should provide a positive and reliable market signal not only for the investment in a technology, but also for the investments in domestic manufacturing capacity and infrastructure that will help lower costs and scale up availability. *(George Bush 16 April 2008)*



**INTERNATIONAL EMISSIONS TRADING  
ASSOCIATION**

# The big energy numbers and where they might come from

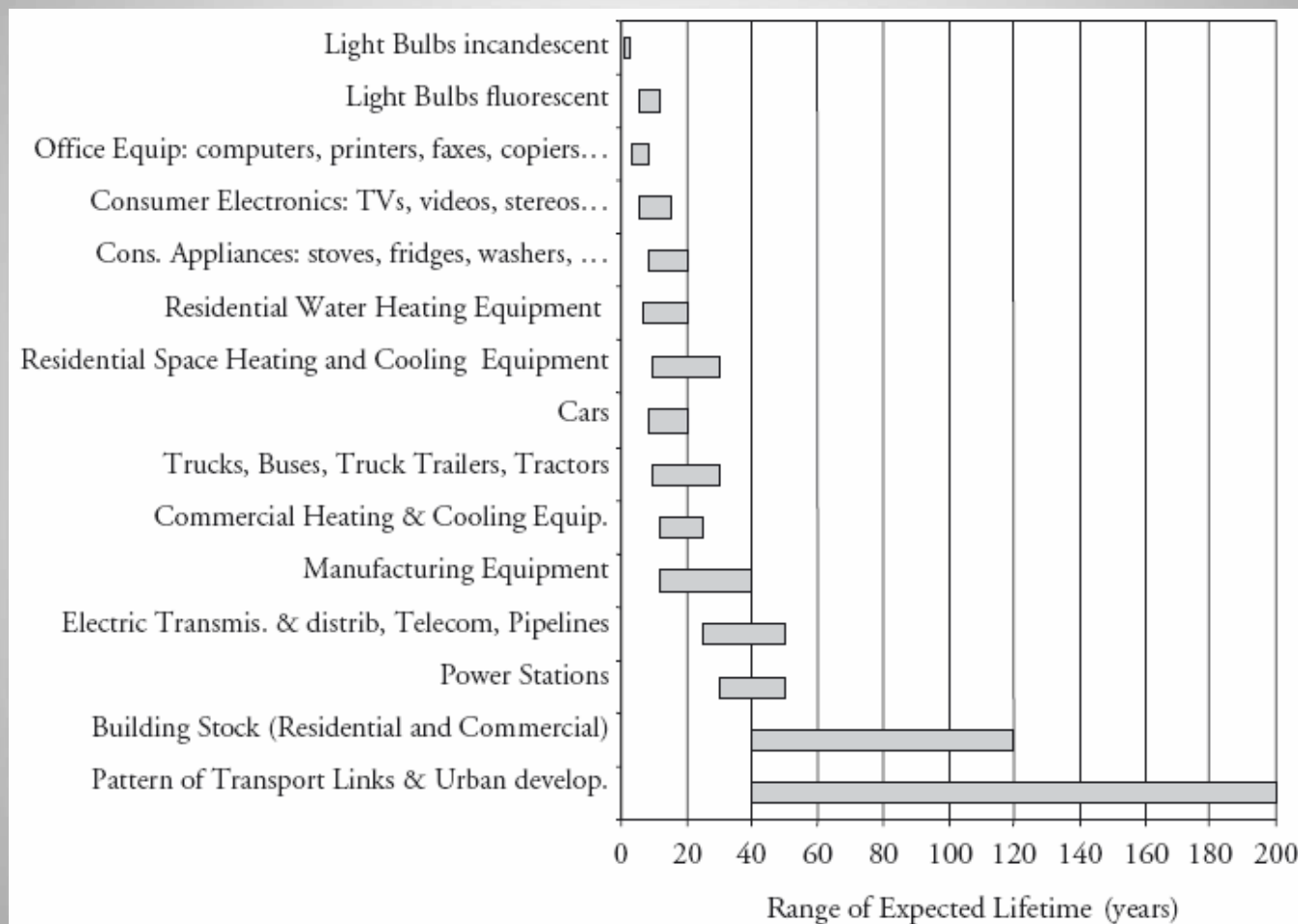


Source: IEA



**INTERNATIONAL EMISSIONS TRADING  
ASSOCIATION**

# Remember the Capital stock turnover rates

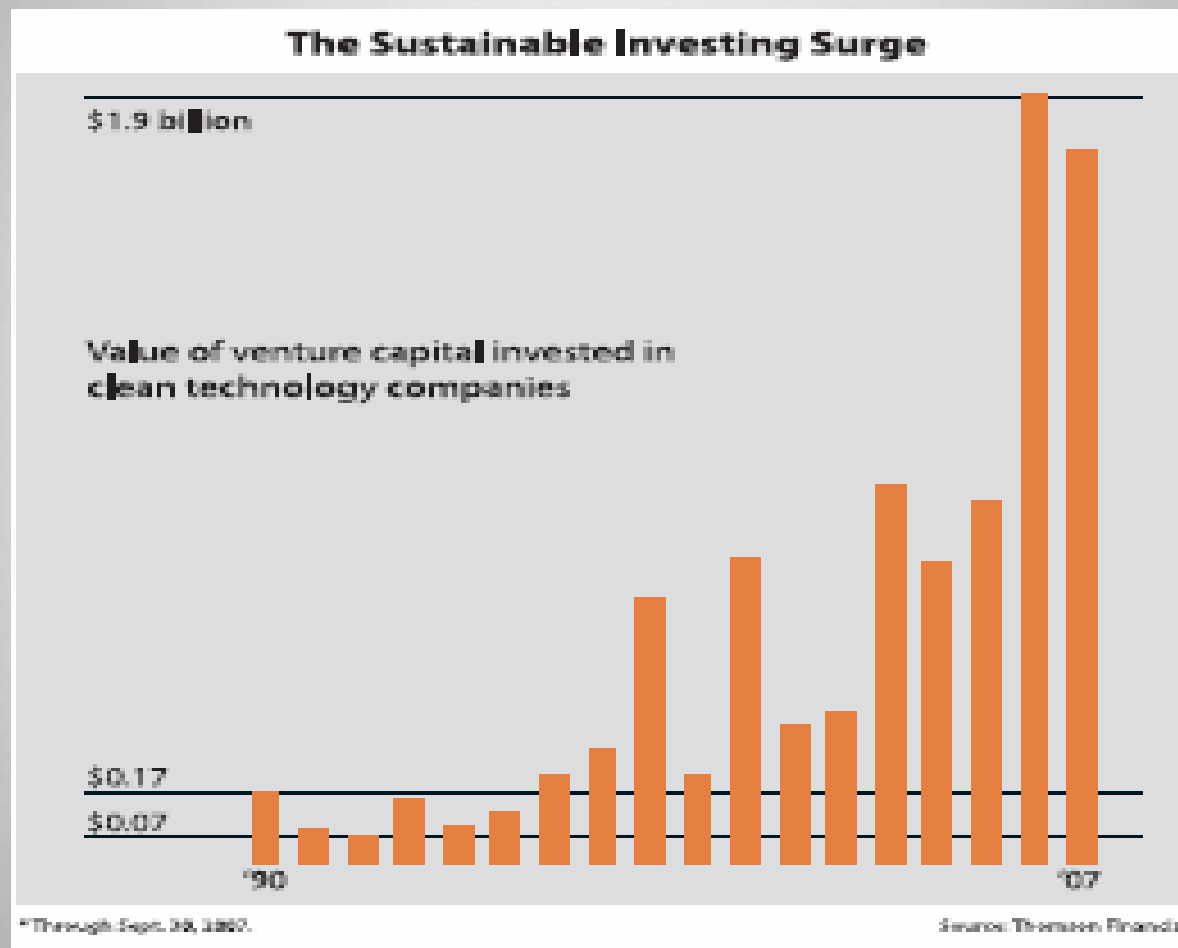


Source:  
Philibert  
(IEA)



**INTERNATIONAL EMISSIONS TRADING  
ASSOCIATION**

# How close is the seventh Cavalry?



**INTERNATIONAL EMISSIONS TRADING  
ASSOCIATION**

# In conclusion

**So the technology path is :**

- **possibly definitional of the new regime**
- **the only way that reductions are achieved**
- **politically a necessary foundation of any agreement**
- **not going to be taken without public money**
- **dependent at scale on incentivised private money, global if cost-effective**
- **probably going to take a heck of a long time.**

