TRIGGERING SERIOUS INVESTMENT IN CARBON ABATEMENT/REMOVAL

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HISTORY

- Over past 10 years Europe has failed to significantly mitigate its carbon emissions

- Within Europe, UK has faired little better

HISTORY

- The main plank of policy, the EU ETS with an EUA price of 5 euros has itself triggered no investment in CO2 abatement
- Meanwhile the EU ETS has cost all the economies of Europe a large fortune in imposing a charge on energy production and other emitting industries which has impacted upon all aspects of their economies
- This imposition has clearly been totally wasted and is irrelevant.

THE OUTCOME SO FAR

- This failed scheme has already put Europe at a competitive disadvantage to the rest of the world.
- If the price of EUA was to climb from c.5 to a level that might trigger investment (c. 50 - 100 Euro) it would cripple all EU economies.
- If it did trigger investment in abatement, it would still fail in terms of economic efficiency.

ALTERNATIVES

- Over time, the UK has introduced a plethora of alternative incentives to promote carbon abatement.
- Some of these have worked
- As a result - we have windmills, we might have nuclear in about 10 - 15 years and we are perhaps getting closer to triggering a small initial investment in CCS.
- In reality - not much to show for 10 years of effort and - tremendous confusion has typified the scene.

NEW DIRECTION

- In the electricity sector, the EMR at last shines a beacon of light.
- Is this progress? Is it sufficient? Should it be replicated?
- Technically in terms of operational mechanics and economic impact, it is vastly superior to EUETS but it still leaves legacy problems behind

NEW DIRECTION

- Necessary as it definitely is, carbon abatement remains a very expensive policy
- One way or another, those *real costs* have to be born within the economy that commits to it

REAL COSTS

- Those *real costs* flow into the economy
- Any economy that does commit to carbon abatement, be it UK, EU or US is then inevitably disadvantaged compared with those who do not.
- So quite soon - the whole world needs to play the game by the same rules.
- Timing and market mechanics are crucial to getting the world to play this game.

THE PROBLEM

- Collaborative positive and committed action by the entire world on any costly issue has seldom if ever happened
- It is not likely to do so in this case
- Sole action by individual economies is possible but leaves the early movers disadvantaged

How do we solve this problem?

DIMENSIONS OF THE PROBLEM

- The electrical generation sector alone (the world's largest emitter) may need to invest countless trillions of £/€ in a period of 20 years to avoid the potential disaster of unwelcome Climate Change.
- Even the resources and the inherent capability of world industry to deliver such massive investments in such a times scale across the world is not easy to envisage

INVESTMENT

- **Such massive investment can only come from the world's governments or from private industry.**
  - Governments don't have the money in their budgets and to get more, electorates need to be "convinced "
  - Private industry can't spend the money unless it represents sound business. This means convincing their Boards and shareholders and securing the finance. Crucially the investment *must deliver an economic return for the level of risk incurred*).

COMPETITION

- World economies can face such policies together in concert but only if all act in unison - then:
  - Energy costs rise together across the board
  - There is no differential advantage/disadvantage
  - It becomes synonymous with the oil shocks of the ‘70’s.
  - The world survived the oil shocks and together could survive the Climate Change equivalent.

TIMING

- It is not physically possible to carry out world carbon abatement at a stoke
- It will take 20 – 50 years
- To achieve this by imposing a carbon tax or the Cap-n-Trade scheme from day 1 is fundamentally unsound.
- Both imposes increased cost across the board from day 1 whilst the effect in terms of carbon abatement will inevitably take many years
- To be successful the cost incentive they provide for investment needs to be beyond all potential initial estimates

ECONOMIC IMPACT

- The economic cost to the economy is 20 times greater (NPV[10])in either of these models than by directly incentivising each investment as it is built and operated.
- The UK EMR model is sufficient and efficient
- All other schemes in the UK including the EUETS and carbon tax serve only to add unnecessary burden to the economy
- They should all be scrapped
- All other emitting industry sectors need similar schemes
- A global version of EMR or similar should be pursue d

FINAL THOUGHT

- **Why involve governments at all in the mechanism?**
- Subsidising new investment could be financed directly by each industry (electrical generation, steel, fertilizer etc.) by charging a levy across its total production sufficient to provide the subsidy for a program of investment for abated plant.
- The governments only role would be to lay down the abatement profile that the industry must achieve over time.
- The industry would have to invent its own rules to comply
- Constituent companies would have to pitch their best offer to win the subsidy from their peers