



Industry Expert Review Workshop

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The Industry Expert Review workshop, held on 9-10 February 2009 at the IEA, brought together experts from the aluminium, cement, chemicals, iron & steel and pulp & paper sectors to discuss the scenario results and key findings of the latest IEA industry analysis. Results of these discussions will provide input into the new publication. This document reflects discussions of the participants at the workshop. The views expressed in this paper do not necessarily represent those of the IEA or IEA policy.

Chair's summary

- Additional work needed to improve data availability and consistency across countries. Given China's dominance of growth in most of these sectors in the last decade a special focus on better understand the situation in China is needed. In particular the performance of old and new China.
- Participants cautioned use of policy development based on uncertain data.
- Industry believe significant uncertainty with development of new technologies – different views will always remain – especially true for CCS – some believe some are more pessimistic – this is an interim solution – to make a CO₂ low world we need this in interim – but in LT we need CO₂ free products
- Link with a decarbonised power grid. The power sector is further ahead than industry in becoming CO₂ free. There is a need for joint implementation of technology options linked to the power sector. eg. CCS.
- Uncertainty was highlighted on the differences between regions. In some industries differences may be bigger than in others. Regional abatement cost curves should be developed together with sector abatement cost curves to highlight differences in costs between regions. Cost curves should not be based on European costs and should provide greater detail on assumptions applied.
- Comparison of past and future – improvements comparable with those in past maybe possible in future as well. New technology may bring additional opportunities to take advantage of new low hanging fruits.

- Roadmaps – need specific roadmaps for specific sectors – technology policy and implementation not just about technology – need to be global – IEA is trying to address this – China, India Russia invited to be partners of IEA – this is crucial for industry – need this global approach for industry without it we will not have a solution.

Roundtable – Conclusions and messages to G8, IEA Ministerial and for COP 15 Copenhagen

- Industry believes the work of the IEA Secretariat is valuable and supports continued collaboration.
- Governments should focus on improving data quality and consistency.
- Mixed views were presented on the impact of the current economic crisis on medium and long term materials demand. Some suggested significant downward revisions were needed to our production figures, while others suggested that demand growth would continue due to higher population growth and higher per capita income in developing countries.
- The economic slowdown could have an impact on the Baseline, as the restructuring of certain sectors could see the acceleration of the retirement of less efficient facilities.
- A proper balance between energy efficiency/CO₂ reductions and economic efficiency is needed.
- Deep reductions in CO₂ emissions in industry will require the development of new technologies. Many of these technologies are still at the demonstration and pre-competitive stage and the risk of technology failure should not be underestimated.
- Availability of capital to the sector and attractive funding is needed to stimulate investment in new technologies. Investment won't occur with current policy settings and economic outlook.
- CCS is the key solution for industry to reduce CO₂ emissions, but this is only an interim solution in the long term.
- Greater focus and hence investments in R&D are needed to develop CO₂ free processes in the very long term. New breakthrough technologies are needed.
- Decarbonisation of the power sector is critical for industry to reduce CO₂ emissions.
- An appropriate regulatory environment is needed if companies are to implement the technology transition needed under a scenario of deep emissions reduction. More stress should be given in each of the sector chapters on the long term signals needed (clear long term CO₂ price that will be implemented globally, etc).
- There is value in sector roadmaps if participation included all major producers.

- Efforts to include China and India in the industry analysis and collaboration should continue. A solution for industry must include participation of all major economies and should not only focus on G8. The importance of China should not be understated.
- Agreements based on intensity targets which do not limit absolute emissions may be more acceptable to developing countries.
- Changes in the risk profile of the power purchases have created greater uncertainty and risk for industry.
- Should more prescriptive policies be recommended if we are to reach a solution to climate change? Markets alone will not bring the needed reductions in emissions.
- Options considered should take into consideration the overall economic and environmental sustainability.

Next Steps

- Any additional comments on the 2nd draft of the sector chapters should be sent to IEA by 20 February.
- A 3rd draft of the sector chapters will be circulated by IEA in early March.
- Industry overview, cross-cutting, policy and materials chapter to be circulated for review.
- Publication scheduled to be released for summer 2009.