



MEETING SUMMARY
CSLF Financing CCS Task Force Meeting
London, United Kingdom
11 October 2009

Prepared by the CSLF Secretariat

LIST OF ATTENDEES

Australia:	Margaret Sewell
Canada:	Ian Hayhow
European Commission:	Jeroen Schuppers
France:	Bernard Frois (Chair)
Japan:	Shinichi Terada
Norway:	Derek Taylor
South Africa:	Muzi Mkhize
United Kingdom:	Martin Deutz
United States:	David Denton, J.P. Dutton, John Hammond, Jeffrey Jarrett, Andrew Paterson, Maria Pineda
GCCSI:	Chris Short
World Bank:	Richard Zechter
CSLF Secretariat:	Barbara McKee, Jeffrey Price

1. Remarks of the Chair

The Task Force Chair, Bernard Frois, welcomed the attendees to the meeting and reviewed the previous meeting of the Task Force, which took place on 30 June 2009 in San Francisco. At that meeting, it was decided that a framework for risks and rewards for Carbon Capture and Storage (CCS) would be developed. A preliminary paper on that subject was developed by Andrew Paterson and Maria Pineda. Dr. Frois thanked Mr. Paterson and Dr. Pineda for their good work and stated that it was important now to have a document drafted by experts and that something practical was needed that would focus on non-grant approaches to financing. Dr. Frois also noted that the CSLF-IEA workshop on bridging the commercial gap held in New York in September also addressed financial issues.

2. Discussion on Financing Challenges Facing CCS

The discussion focused on the how to address the financing challenges facing CCS and the different types of financing required.

Jeroen Schuppers noted that the European Commission would be initiating partnerships for large-scale CCS projects. In these partnerships, the Commission would provide part of the funding for at least seven projects with the rest of the financing being provided by industry. These partnerships will involve first movers and formal knowledge sharing.

Martin Deutz noted that different types of energy companies need different financing approaches and that debt financing would be widely used. He also asked whether the energy markets were designed to take on the added costs.

John Hammond asked how costs would be covered and remarked that there were differences in financing between public organizations and private companies.

Chairman Frois noted significant differences among countries, particularly between industrialized and developing countries. He stated that the Task Force needed to consider that the attitude of most countries is “we don’t want your solution to our problems.” That is, they want their own solutions to their own problems. Dr. Frois also said that one problem was that CCS is not on most countries’ agendas as a first priority.

3. Report on Risks and Rewards

Andrew Paterson briefly summarized the report the framework for risks and rewards. This report follows a risk-oriented framework, which is typically used in financing. Most of the financing will be debt on the bond markets. In this market, credit risk issues dominate. It is also important to have a regulatory environment that enables project developers to meet the financing challenges. Perspectives of the bond markets, governments and investors all need to be taken into account. Maria Pineda, the co-author of the report, stated that it was important not just to do analysis, but also to educate the politicians.

Chairman Frois responded that he agreed that education was a big problem that he saw three basic tasks involved in advancing the financing of CCS projects:

1. Reducing costs,
2. Making financing work, and
3. Education.

4. Discussion on Other Financing Issues

Further discussion centered on the financing issues that need to be addressed. Chris Short stated that one challenge was to finance the 20 demonstration projects called for by the CSLF and IEA in their recommendations to the G8.

Ian Hayhow said that it was important to address how risks are shared and that distribution of risks is part of the function of government.

Andrew Paterson stated that CCS technology needed to be financed at different maturity levels. Chairman Frois responded that financing was a “Catch-22” problem of financial market needs is versus technology maturity.

Dr. Frois asked what would speed up investment. In response, Mr. Hayhow noted that governments are now committing to financing shares of CCS projects and that US\$25 billion in incentives have been announced around the world.

Martin Deutz asked whether ministers understand the needs to finance CCS. Jeffrey Jarrett replied that he believed that Ministers do not understand the need, but it was important to make sure that they do. In particular, he thought the goal of this needed investment is not understood. Mr. Deutz said that we do not want the message about money to be subsumed in technical information about what it takes.

David Denton said that the world has changed over the last two years. It is much more difficult to get financing, even for more conventional projects. Also, although it has recently moderated, there has been a steep run up of capital costs.

Mr. Hayhow stated that five years ago no-one knew about CCS. Now, due to the CSLF it is known but, he asked, where are the champions?

5. Next Steps

Muzi Mkhize suggested that it would help to have some type of a roadmap for advancing financing. In this regard, Barbara McKee further suggested that the roadmap address the roadblocks to financing and what could be done to overcome them.

Richard Zechter suggested that the Task Force develop pro-forma projections for CCS projects going 8-10 years into the future. These should start with a definition of the targets and then address what needs to happen to get there. They should consider how financing may evolve, the various pieces of financing packages, and how this would vary in different regions. Martin Deutz remarked that no-one has described the basic financing models and that has to be on the agenda.

A consensus was reached to develop and assess business models and pro-forma projections for commercial deployment of CCS and to work with industry, the financial community and other stakeholders to do this.

Ms. McKee suggested that the Task Force come up with a brief statement which could be presented the Policy Group and discussed with stakeholders.

It was decided that a subgroup would meet immediately after the Task Force Meeting to draft a description of what was decided for presentation to the Policy Group at its meeting the next day.

6. Follow-Up Discussions

After the meeting of the entire Task Force, a subgroup consisting of Bernard Frois, Martin Deutz, Andrew Paterson, Maria Pineda, and Jeffrey Price drafted a short PowerPoint presentation summarizing the conclusions and recommendations of the Task Force for presentation by the Chair to meeting the Policy Group on the next day. This presentation is attached.

PowerPoint Slides for Presentation to Policy Group

ACCELERATING COMMERCIAL CCS: CREATING VIABLE BUSINESS MODELS



Widespread global deployment of CCS will require that CCS move from research status through demonstration projects to commercial operation. Diverse projects will need to be financed, constructed, and operated, and in different markets.

The CSLF Financing Task Force will work with industry, the financial community and other stakeholders to formulate and promote viable business models for the commercial deployment of CCS. Different business models may be required because of differences in industries, energy markets and regulatory regimes; but all business models will need to provide an appropriate balance of risks and rewards to all participants, including the public. Business models will need to adapt as the technology matures and the constituent businesses evolve.

Task Force on Financing CCS

ACCELERATING COMMERCIAL CCS: CREATING VIABLE BUSINESS MODELS



The Task Force on Financing asks the Policy Group to endorse this proposed work.

Recommendation:

The CSLF will engage with the financial community, industrial sectors and other stakeholders to formulate viable commercial models for commercial deployment of CCS.

Task Force on Financing CCS