Carbon Dioxide Capture and Storage Coming of Age: Berlin Meeting Accompanied by International Recognition

Summary Report on the Policy Group

Carbon Sequestration Leadership Forum First International Projects Workshop for Stakeholders

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(Note: appropriate acknowledgment of specific hosts was penciled in on the scene) Thank you ladies and gentlemen for your interest in the Carbon Sequestration Leadership Forum.

I want publicly to thank those who worked so hard to arrange this stakeholder workshop in Potsdam and to again thank the Federal Ministry of Economics and Labor for the efforts so generously extended in hosting the Forum's meetings in Berlin earlier in the week.

In turn, I also want to welcome all of you, and to offer a special welcome to those here who were unable to attend our Berlin activities; and to all who are new to both the projects and the purposes of the Forum.

In dong this, I also voice the sentiments of my boss Principal Deputy Assistant Secretary of Energy for Fossil Energy Mark Maddox, for whom I am a last-minute substitute.

Mark is the Chairman of the Forum's executive arm the Policy Group, and he wanted to deliver this report in person; but he was called away at the last minute.

He asked me to extend his heartfelt apology for having to miss this appointment.

He believes – as do I – that the full involvement of stakeholders is critical to the Forum's ultimate success.

This is the Forum's first International Projects Workshop for Stakeholders.

As such, it is standing proof of the importance the Forum attaches to stakeholders, as are other developments of this last week, which I'll cover in a moment.

My objective is to summarize the week's activities and to offer a perspective on them.

Since a number here are unfamiliar with the Forum, some background may be in order before I turn to the details.

The Forum is a voluntary climate initiative of more than 20 developed and developing nations that account for 75 percent of all manmade carbon dioxide emissions.

Members are pledged to collaboration and cooperation in accelerating the research, development, demonstration and deployment of technologies that will bring on reduction and steady elimination of the greenhouse gas emissions that account for more than 60 percent of the world's CO_2 – those from electric generation and other heavy industrial activity.

This week we held the 2005 inter-ministerial meetings of the Forum's Policy and Technical Groups. Members of these two bodies are entrusted by their home-nation energy ministries with the timely development of carbon dioxide capture and sequestration technology.

The Forum is based on recognition of what a distinguished German energy executive has called the facts and the physics of energy.

Today the facts and the physics of energy bring home these points:

- All nations will have to rely on fossil energy to sustain human life and to provide the economic growth that improves life for some years to come, but especially the developing nations;
- Raising fossil-fuel use means increasing emissions of carbon dioxide, the greenhouse gas whose reduction and stabilization the world is committed to seek;
- Stabilization will not be possible without carbon capture and storage as a practical way of making the deep cuts required in additions of CO₂ to the atmosphere;
- And, stabilization is impossible without the constructive involvement of key developing nations whose projected additions to emissions will dominate greenhouse gases in the coming century.

Organized only a little more than two years ago, the Forum has begun coming of age in international affairs.

This year has seen a progressive rise in recognition as follows:

- Last winter, in the Mainz Declaration, the U.S. and Germany pledged cooperation in the development and deployment of these technologies and identified the Forum as a medium of cooperation with developing nations;
- Last spring, the joint statement on items of agreement at the 2005
 European Union U.S. Summit made similar pledges;
- And last July, the leaders of the G-8 nations moved the Forum and the technology to the forefront in their Gleneagles Plan of Action on Climate Change, Clean Energy and Sustainable Development.

Gleneagles brought special assignments to the Forum, especially in the realm of cooperation with the International Energy Agency and as a medium for the development, deployment and dispersion of technology.

Then, as we met in Berlin this week, the Intergovernmental Panel on Climate Change met in Montreal to pub the final touches on a Special Report on Carbon Dioxide Capture and Storage.

The IPCC found that::

- Capture of up to 90 percent of CO₂ is possible in electric generation and from other large-point sources;
- Geologic storage can provide up to 55 percent of the mitigation necessary to achieve stabilization;
- Capture and storage compares very favorably in cost with options that have received more attention to date such as nuclear and renewable energy;
- Capture and storage can reduce the cost of stabilization by 30 percent or more;
- Capture and storage will lower mitigation costs and increase national flexibility in seeking stabilization;
- And, worldwide potential for geologic storage appears adequate to support the effort.

These key findings, and others, go straight to the Conference of Parties of the United Nations Framework Convention on Climate Change which takes place in Montreal this fall.

We of the Forum are content leave it to our respective diplomats to settle the terms and the timing of stabilization.

Our job is to deliver the technology answers that will contribute significantly to stabilization.

In this, our pace began to quicken in the Berlin meetings, and also as a result of the Berlin meetings.

We endorsed for ministerial approval seven new assessment and demonstration projects, and you'll hear more about these later today.

However, I should not that they include the first research and development projects in developing nations – two in China and one in India, both members; and one in Algeria, which is not a member but had sponsorship from member nations.

Forum projects now total 17, and other proposals are pending, some from developing nations.

Our Berlin meetings also produced action that included:

- Presentations on new responsibilities accruing to the Forum as a result of the G-8 Summit and its directions to increase cooperation with the International Energy Agency;
- An immediate response in the form of an affirmative letter to the head of the International Energy Agency;
- The establishment of a Task Force on strategic planning and long-term objectives – its goal will include integration of G-8 expectations, IEA cooperation and the development of storage capacity in developing nations;
- Acceptance of a process to ensure that new projects meet CSLF criteria and are oriented toward filling gaps in knowledge;
- Acceptance of India's offer to host a pre-Ministerial planning meeting in April 2006 – the first-ever such meeting in a developing nations, which demonstrates a new degree of involvement;
- And admission of three new members—Greece, the Republic of Korea and Saudi Arabia.

Membership has grown from 13 nations little more than three years ago to 22 today, which is another manifestation of the international momentum growing around capture and sequestration.

This heightened interest led to a decision to place a temporary moratorium on new membership applications pending executive study. The Forum wants to be sure that future growth will not dilute its purpose.

At the same time, the Forum's dedication to purpose became ever more apparent Tuesday during the presentation of member progress reports on CO₂ capture and storage and related activities.

In that session, member nation after member nation expressed its future need for energy, especially electric power, and expressed its commitment to developing the right technology.

Nations as diverse as Germany and China, or the Netherlands and India, expressed their commitment in different ways: But most expressed commitment, and most expressed need.

A delegate from India, where they face the need for almost 400,000 megawatts of new power, gave a fitting name to the CSLF initiative to develop capture and storage.

He called it, "This great endeavor."

And it is a great endeavor.

It is, as the IPCC determined, the one option that will give all nations flexibility in dealing with energy concerns and greenhouse gases.

G-8 has endorsed the Forum and its technology. IPCC has endorsed the technology.

CSLF is a going concern now, and now the concern is to keep it going.

We want to move forward as rapidly and as strongly as possible, which brings me back to stakeholders like you.

Chairman Maddox and his Co-chairmen John Ryan, of Australia, and Sergio Garribba, of Italy, led this week in laying out the pattern for future Forum relationships with industry, institutional and public-interest stakeholders.

To begin, the Chairman commissioned the first-ever meeting with international stakeholders in advance of an inter-ministerial meeting of the Policy and Technical Groups.

As a result, stakeholder concerns were presented to the Policy Group and consensus changes undertaken that include:

- Greater openness in the work of the Policy and Technical groups, including the availability of formerly limited-access information on the website;
- The beginnings of formal stakeholder organization under the auspices of the World Energy Council;
- And, a decision to institutionalize the pre-meeting briefings of stakeholders – to meet with interested stakeholders before every international meeting, including the one to be held in India in April.

The Forum is coming around to recognize that stakeholder involvement is required:

- To identify and successfully develop the right technology;
- To create a base for the rapid manufacture and deployment of successful technologies;
- To achieve market acceptance;
- And, to win public acceptance.

We recognize that, at each step, private-sector or institutional or public-interest stakeholders have roles of special importance – most often in some combination of the three, but also acting alone.

Mark Maddox closed the Berlin meetings yesterday with the notation that he had never seen or felt such breadth and depth of member participation.

The CSLF is a going concern now.

You'll be reading and hearing more in the future about the emphasis being placed on the technologies of capture and storage.

We've passed our first stage and re coming of age.

Now we are moving on to the serious issues that will make deployment lowcost, feasible, practical and constructive.

On behalf of the Forum, I invite every uninvolved stakeholder here to join us in what our Indian delegate rightly calls "this Great Endeavor."

Thank you for your attention and attendance.