

"Putting CSLF on Steroids" Policy Group Presentation: Svend Soeyland Bellona

Ladies and gentlemen,

Thanks to the CSLF secretariat for giving Bellona this opportunity and for recognizing environmental groups as relevant players in promoting Carbon Capture and Storage. I know that some of the stakeholders at times have felt rather sequestered themselves, but I anticipate that this meeting may yield a more substantial role for us in the future.

Some brief facts about Bellona: We started working on CCS in 1993 because we realized that our preferred choice of energy - renewables – together with energy efficiency measures would not be able to replace carbon intensive energy production soon enough to bring global warming under control. Our early interest in CCS gave us a unique position as a competent stakeholder both in Norway and in Europe.

Bellona's founder, Mr Frederic Hauge, is a member of the Advisory Council of the European Technology Platform for Zero Emission Fossil Fuel Power Plants. Bellona is also represented in three of the five working groups. (slide) ZEFFPP is important for three reasons: It sets an ambitious timetable for reductions of CO2 emissions in Europe. It will stimulate cost reductions for capture technology, and it allows stakeholders such as Bellona to work on substance from within. There might be lessons to learn from this setup...

Our support of CCS and enhanced oil recovery has raised a few eyebrows among environmentalists. We rely on other players' commitment not to become discredited as "greenwashers". We think that utilities in general



can do better in publicly calling for carbon constraints. It is in their own interest to realize that greenhouse gas emissions are increasingly viewed by the investment and insurance companies as liabilities. They should instead become valuable assets. As you know, latecomers will loose.

We have to start a transparent and inclusive process to highlight leakage and public safety concerns. It can bring CCS skeptics out of the trenches. To make coal widely accepted, we would need to show a credible "cradle to cradle approach" that can keep legacy issues and devastating mining practices at bay. It should be clean coal without greenhouse gas emissions all the way; without mining accidents, health hazards to local residents or destroyed streams and valleys.

Fossil energy in general, and coal in particular, may lock us into a development where carbon emissions increase to a critical level. Since CLSF started in 2003, roughly 18 billon tons of new carbon has come on line from Coal Power alone. On average, China is firing up one new coal power plant a week, and the rest of the world is providing a similar number of plants. The average lifespan is 40 years.

The first CCS-ready power plants are hopefully in operation by 2012: (FutureGen, Tjeldbergodden, Petershead, Swarze Pumpe, Carson L.A to name a few), but projected growth of carbon intensive power production far outstrips these gains.

Is this the best we can do as policymakers, researchers, utilities and technology developers? My short and simple answer is NO.



Therfore - Lets put CSLF on Steroids!

1) - Identify CO₂ value chains.

Bellona strongly believes that wherever money can be made, technological breakthrough will follow. Carbon capture at Beulah, In Salah, and at Sleipner made first and foremost economical sense. Value chains will trigger deployment and lower cost for infrastructure and technology, but we need more:

2)-Promote a global price tag on carbon emissions.

There is growing recognition that carbon emissions needs to have a price tag and that both carrot and stick approaches are needed. We believe that global commitment is the only way forward. Developing nations that do not have obligations under the Kyoto protocol are likely to be hardest hit. A global pricing will also ensure long-term predictability for investors and utilities.

3)-Ensure leapfrogging in emerging economies

It is to early to declare winners between various technologies, but we should at least be sure that whatever we build are not locked out of future innovations. There should be no excuse for delaying deployment. Concerns of intellectual property rights should be resolved. We believe that "clean coal" programs (with their obvious environmental benefits) – but without CCS, will discredit our efforts over time.

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We understand that CSLF is not mandated to establish trans-boundary legally binding commitments. Nevertheless, each of you should carefully consider if the countries you are operating in or representing have anything like this in place.

If not, technology may prove feasible, but actual deployment will at best be piecemeal. Perhaps we will have 30 de-carbonized power plants by 2020 compared to hundreds of plants with perhaps clean coal technology but vast CO_2 emissions.

What if we could set a target that next time we meet in the CSLF, each participant should bring specific proposals that would ensure rapid deployment.

For example; In 2008, we should have secured that at least 10 percent of new power generation is CCS-ready. In 2012 50 percent, and 2020 100 percent.

Some words of encouragement before I close: A few years ago, very few people outside this room knew about CCS. Thanks - partly to our efforts – the public are getting curious! Our challenge is to cultivate this growing interest!

Thank you for your attention!

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