JUN ARIMA

Director General, JETRO London, Special Advisor for Global Environmental Affairs, METI

Cécile Maisonneuve, Director of the Centre for Energy at IFRI

Thank you. You provide an excellent transition to the next part. I know there are some reactions to the debate, but we have to shift to the second part because we are running a bit late. We are starting the second part of the debate on the question of the link between competitiveness and the fight against climate change because this remains our policy ultimate goal. I will give the floor to Jun Arima, who is a special adviser for Global Environmental Affairs to METI as well as Director General of the Japan External Trade Organisation in London. I want to ask Mr Arima whether we can solve what seems to be an impossible equation. Thank you.

Jun Arima, Director General, JETRO London, Special Advisor for Global Environmental Affairs, METI

Thank you, Cécile. Sitting next to Bill is a bit nerve-wracking because he was my boss when I worked for the IEA, but I will do my best in front of him. In response to your question as to whether we could simultaneously mitigate climate change and enhance international competitiveness the politically correct answer is yes.

There is an argument in Europe regarding green growth that imposing carbon constraints through higher carbon prices could create new technologies, new industries and new jobs. However, looking at the political and economic situation in Europe, things are not so simple. Let me present a few examples.

Amid economic crisis many European countries, including Germany, are experiencing a political backlash against excessively costly new energy-supporting schemes. The UK, where I am living now, is not an exception to that. Germany, which is regarded as a green leader, is strongly opposed to the strengthening of the emission standard for vehicles for fear of weakening international competitiveness. The European Parliament is strongly opposed to the so-called back loading of the EU-ETS again due to international competitiveness concerns.

My country, Japan, is a typical example of conflict between combating climate change and enhancing international competitiveness or, more broadly, economic growth. All nuclear power plants are currently offline in Japan due to the Fukushima accident. We have had to mobilise all available energy sources to keep the lights on, including LNG, oil and even coal. This has caused a massive outflow of national wealth amounting to JPY 3.8 trillion. That is about EUR 29 billion. It is not peanuts. Japan had a trade deficit in 2011 for the first time and it has continued since. Due to the increase in the import of LNG and a newly-introduced feed-in tariff in Japan, which uses the German feed-in tariff as a model, energy prices for the industrial sector have already increased by 15%, which already jeopardises international competitiveness.

Increased use of fossil fuels also raised Japan's CO2 emissions and in COP19 Japan introduced its tentative target of a 3.8% reduction below the 2005 levels without counting nuclear resumption and was heavily criticised by environmental groups. We are making maximum efforts to improve energy efficiency and promote renewables. However, it is physically and economically impossible to replace the big chunk of nuclear with only energy efficiency and renewables. If we did so it could cause an enormous cost burden to the Japanese economy and, as you know, the utmost priority of our government is currently economic recovery and enhancing industrial competitiveness. As long as we cannot use carbon-free nuclear power we need to ensure a stable power supply, even counting on fossil fuels.

All in all, green growth is the right direction, but its benefits will be felt in 10 to 20 years' time. It is not providing a persuasive prescription for addressing our immediate problems, such as economic crisis, unemployment or energy shortage. If stringent emission targets were to enhance international competitiveness and generate new jobs, the UN Climate Conference would not be so acrimonious. This indicates that mitigation efforts are not cost free and could

stymie economic growth, at least for the time being. We therefore need to face this political and economic reality. Without solid economic growth, any green policies will not be sustainable.

Should we then sacrifice mitigation efforts for the sake of industrial competitiveness? Of course we should not. Global warming would eventually cause significant cost to current and future generations. However, policies driven only by climate change mitigation will probably not be sustainable. Other policy objectives, such as economic growth, energy security or even air pollution control, with the co-benefit of mitigation, may be more durable. In this context the IEA's "redrawing the energy climate map" is thought-provoking. It has proposed 4-for-2°C scenarios with four policy measures keeping the door open to 2°C scenarios through to 2020 with no net economic cost. These four policies are adopting specific energy efficiency measures, encouraging the construction and use of highly efficient coal power plants when coal-fired power is used, minimising methane emissions from upstream oil and gas production and accelerating the partial phasing out of subsidies to fossil fuel consumption.

Although 4-for-2 could keep the 2°C target alive, the IEA also argues that it is not sufficient. To achieve the 2°C target global greenhouse gas emissions need to be reduced by 78 gigatonnes through 2035. Could we then expect such a massive reduction from ongoing UN negotiations? As someone who has attended the COP negotiation more than 10 times, I would be rather pessimistic or cautious about that. Gigatonne gap analysis is useful as a yardstick, but once it comes to be used for international negotiation, it would lead to a battle over scarce carbon space, which would go nowhere in my opinion. WTO negotiations are in deadlock, although they could eventually result in the plus sum for participating parties. It is not surprising that the UN is not likely to achieve a grandiose outcome since it is aiming at minus sums.

A future international regime would not be a single agreement where the UN is functioning as a global government. In my opinion it is more likely to be a multi-layered or fragmented system composed of the UN system, regional, pluri-lateral, bilateral and sectoral frameworks. A UN framework is likely to be a so-called pledge and review system of nationally determined commitment, not Kyoto-type top- down regime. Regarding international competitiveness, sectoral arrangements provide interesting insights in the field of international maritime and air transport in addressing climate change mitigation engaging both developed and developing countries. Likewise, in the fields of iron, steel, cement and aluminium international industry associations are tackling climate change with the participation of companies in both developed and developing countries.

Climate change is a global problem and we should therefore broaden our scope from domestic mitigation to global mitigation. It is meaningless to just focus on domestic mitigation, penalise domestic industries and drive them out of our countries. That is just simple carbon leakage. Disseminating clean and efficient technologies to developing countries is compatible with retaining international competitiveness. A recent agreement between Japan and Turkey on a nuclear project is such an example. If Japan's most efficient super-critical thermal technologies are deployed in the coal-fired power plants in US, India and China, that could reduce 1.3 gigatonnes of CO2, almost equal to Japan's entire emissions.

Climate change is also a longer-term challenge with a perspective of 50 years or 100 years, so we should liberate ourselves from a shorter-term mindset which only focuses on midterm national targets and timetables. If we are really serious about climate change mitigation, more attention should be paid to technologies. The ongoing UN negotiations are just focusing on such issues as the transfer of existing technologies and IPRs. A long-term solution rests on a research and development of truly innovative technologies ranging from CCS to batteries to fusion to artificial photosynthesis and space photovoltaics and so on. Spending money on such strategic R&D could be far more effective in some cases in terms of international competitiveness and economic growth than pouring enormous subsidies to existing renewable energy technologies. In a future framework, a nationally determined commitment could include not only mitigation targets or actions but also technology development targets. There is a strong case for international cooperation for developing such innovative technologies outside of the UN.

To conclude, we could simultaneously address climate change and international competitiveness, but we need a smarter approach to do so, as well as a broader scope that features not only domestic but also global mitigation and a longer-term horizon with innovation. Thank you very much.