

A New Approach for Energy Efficiency for Asia

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Introduction

For launching an EU-Japan Cooperative Project on improving Asia's energy efficiency one can cite a number of reasons but most prominently two. Firstly the generally accepted argument that only through cooperation at international level the current and future problems of scarce and costly energy resources and the energy related climate change problems can be controlled or resolved. Indeed there is a commitment now between Asian and European nations to activate such cooperation. In Helsinki in September last year, "Leaders stressed the importance of aiming for energy efficiency and wider use of renewable energies and clean technologies, as the decisions of today will be critical for the world of tomorrow. " They subscribed to the **ASEM6 Declaration on Climate Change**, "Acknowledging that the global nature of climate change calls for the widest possible cooperation and participation in an effective and appropriate international response, and recognising that ASEM partners have a crucial role in shaping and forging long-term policies as well as immediate actions for mitigation and adaptation measures". In this Declaration they "recognise that climate change and security of energy supply are interrelated". They "foresee that very significant resources, an estimated USD 6, 3 trillion, will be invested in the energy sector in ASEM countries by 2030 and see this as a challenge but also as an opportunity." Leaders pledged that "they will cooperate to promote development, transfer and deployment of low carbon technology and access by developing ASEM countries to cleaner and climate friendly technologies... **are committed to enhancing energy efficiency** (jk added emphasis) and scaling up the use of new and renewable energy, adapted to local circumstances." This was confirmed by the ASEM Foreign Ministers Meeting in Hamburg on 29th May were the "Meeting further encouraged and affirmed their support for a closer ASEM-cooperation on climate change and sustainable use of energy".

The second reason is the presently unsatisfactory substance and content of EU-Japan relations, a relationship that recently has begun to slip-back into benign neglect. One only has look at the recent EU-Japan Summit press Statements to quickly understand the low level of commitment to the mutual relationship and lack of joint projects. The last EU Commissions policy guideline (Communication) on Japan dates from 1995 – last century. Japan's visions about her future be it the semi-official "New Vision for the 21stCentury" or the vision of Japan's business community, the Nippon Keidanren "Japan 2025", mention Europe only one time each and in the Keidanren paper rather as a competitor than a partner.

That between two global players is not sufficient. Now to engage in substantial cooperation between the EU/EU Commission and Japan has been for the most cases elusive or frustrating. Different attempts were made in the past hélas with little success. Under President Delors there was even a HL Level Group Meeting on Cooperation – again not much happened. Recently there were two conferences 2006 in Brussels and 2007 in Berlin that discussed cooperation in various fields, *inter alia* on energy cooperation for the benefit of Asia.

However not all seems to be lost. Global concern over energy, be it security or the linked climate change debate might have finally reset the compass towards closer cooperation between the EU and Japan at least in the energy field, since at the EU-Japan Summit in Berlin on 5th June of this year ...” Summit leaders recognise the importance of the ... transfer of technologies” (N.B. to developing countries) to reduce emissions and improve energy efficiency, ...”.The EU-Japan Business Round Table Dialogue (BDRT) of 3rd June in Berlin in its “Recommendations” that were presented to the Summit leaders, proposes under “Immediate Action items Requests for Japan and the EU” :...”Promote the practical advantages of energy efficiency “. A scoping study (see below) by AIE Asia Institute Europe served as input in the BDRT discussions.

This practical cooperation-project proposal is part of an attempt to foster the process of raising consciousness for the need and indeed obligation of the two global partners to engage in concrete projects without delay, to combat energy, non-renewable resources’ waste for the better of all of us, in Asia, in Japan and in the EU. Hopefully, given the urgency and pressure perceived by all, and indeed in the light of the ASEM6 ad latest statements quoted above, EU-Japan cooperation will start to work.

As a footnote, the resources conscience of the ‘world’ has been there before, about 25 years – a quarter of a century- ago when the ‘Club of Rome’ raised and publicized its concern over the limits of available, non-renewable resources. Nothing came of it despite two oil-shocks. Anyway Japan and the EU were not ready then for cooperation, they were just gearing-up for all-out commercial warfare.

Concept

Energy efficiency has a multitude of different facets and equally there are numerous the possible approaches to improving it. The project on possible ways of EU-Japan cooperation for improving energy efficiency for Asia explores in a first attempt two approaches: 1.product related and 2.energy efficiency of energy intensive industries/ heavy emitters through a. using leverage of green procurement; b. using leverage of institutional investors in a similar way as SRI is used for sustainability purposes. For want of any better we call it ‘ERI Energy Responsible Investment’; and c. bench-marking, information exchange, government regulation. This paper deals with the energy using product related approach

The energy use characteristics, safety, environmental characteristics etc. of a product are in many, maybe most cases defined in national regulations, using in many instances obligatory or voluntary national, some times international, or industry standards. As such standards have been and are used by governments as strategic instruments promoting or protecting trade. There is as a matter of fact a form of national/government competition in standards. This situation holds certainly true also for Asia and might intensify over time with the ever growing economic importance of Asia. As far as Japan's industry's ambitions in this respect are concerned, the already mentioned Nippon Keidanren wants that the creation of global and certainly Asian rules be levered on Japanese technologies and knowledge. The European Commission since autumn last year has posted a Standards Attaché at its Beijing Delegation. The United States equally is promoting its standards in the region and China, Korea as well as Japan have their well established and long-time applied standards systems.

While all this certainly has a national commercial rationale, for EU-Japan cooperation to improve the energy efficiency of energy using products on Asia and for Asia, the challenge is to design a process that overcomes this 'national standards competition' that expresses itself *inter alia* in differences in energy efficiency standards. In overcoming national competition, commercial competition should be placed where it belongs, between commercial companies and businesses.

Starting from the experience of the European Economic Community (EEC), when trying to create the single market, that unifying/aligning national standards and arriving at supra-national or international standards is a difficult, slow process, it is suggested that this should not/not be the first line of approach for EU-Japan cooperation to make products used and produced in Asia more energy efficient. Rather the positive experience that the EEC had and the EU now has with the so-called 'New Approach and Global Approach' seems to be the better avenue. The basic idea of the 'New Approach' is simple. Instead of developing fully defined standards the technical 'essential requirements' for e.g. safety (presently the most important issue) of a product or product group would be defined in an intergovernmental process. In the case of the EU these are groups of national government experts competent for those products meeting in a specific regulatory setting. What applies to safety of a product can be also uses for other aspects e.g. energy use/efficiency or environmental aspects. A 'New Approach' directive for 'Pleasure Boats' (yachts, motorboats, water-scooters etc.) for example dealt not only with safety but also with the 'noise' and other environmental aspects of such boats.

Under the 'New Approach' a product satisfying these 'essential requirements' of say safety/ energy efficiency/environmental performance can be placed on the market. By what process/technology a producer has been able to produce the 'safe' product is (with few exceptions) of no concern to the EU Commission/EU national governments (Member States). It can be an indigenous, propriety process/ invention of a specific producer. It could equally be produced by using a national (Member State's) standard like DIN or BIS or, if it exists, indeed an EU

standard produced by European standardisation organisations. To note EU standards are developed on request of the EU Commission by the independent European standards bodies CEN, CENELEC or ETSI in a process of voluntary cooperation based on consensus amongst different economic actors (industry, national standards organizations, SMEs, consumers, workers, environmental NGOs, public authorities, etc). While for EU product legislation following the New Approach, the use of EU standards is in most cases voluntary, their use brings however the advantage that the product has the 'presumption of conformity'. As of present there do not yet exist EU standards for all EU legislation. In the case of use of national standards of EU member states or another technique that allows placing on the market, there is an EU internal 'mutual recognition' that means that a product 'lawfully' placed on the market in conformity with EU legislation, using national standards or another propriety process, is in free circulation within the EU internal market.

The main elements that govern the placing on the market of goods are

- (a) Technical regulations (laws) applying to the characteristics of products;
- (b) Standards (drawn up by consensus), whether for voluntary application or incorporated into the legal framework in some way or other;
- (c) Certification requirements, determining how compliance with regulations is to be determined, including marking and similar procedures;
- (d) Testing procedures for the actual determination of compliance (inc. for propriety technology), and related aspects, such as good laboratory practice, laboratory accreditation, and metrology;
- (e) Market surveillance (including, where appropriate, product liability aspects).

For this to function correctly an administrative infrastructure needs to be in place. Officially recognized accreditation and certification and related bodies exist throughout the EU. An equivalent/similar structure is recommended for this cooperative project with Asian countries (see below). Fortunately as recent experience with the EU enlargement has shown, these institutions can be rather effectively and quickly build-up by strengthening existing organizations and public services that fulfil similar functions.

Once at governmental level there is agreement on the definition of the 'essential requirements' for energy efficiency, then governments can translate those in their national standards, engage in a process to adopt international standards or start a process of creating Asian standards that – since this is a cooperative exercise are/will be made compatible with EU and Japanese and/or existing international standards. Either way a system then needs to be put into place that allows for mutual recognition of those standards/products that have been produced in conformity with the new 'essential energy requirements'.

In order to avoid the time-consuming, tedious and rather ineffective process of international negotiations on (limited) mutual recognition, it is preferable to set-up from the beginning an 'Asian' system of accreditation/certification bodies and related testing procedures etc. Again that should technically – assuming the political will is there – not be too difficult. With some Asian partners there exist

already mutual recognition agreements for some types of products; the EU and China, as mentioned, are talking about introducing the 'New Approach' principle into Chinese product and standard regulation; and most of all, foreign trade requires to produce products for export in line with legislation of its trading partners, the Japan, EU and of course the US. Japan, as by the way Korea, has the added advantage of having the experience of being China's preferred technical components, advanced materials and part supplier.

Process

The realisation of the proposed concept of "Product Energy Efficiency for Asia" passes necessarily through political awareness raising and decision-making, leading to a pluri-governmental negotiation process that has to be understood and be conceived as such.

It is proposed to begin to develop the '*Concept*' for application in reality, first for one energy/electricity using product that for Asian consumers/ society/ economy is of particularly importance, be it because of its widespread use e.g. refrigerators, be it for its economic impact – water pumps for agricultural use might be such a case. For example India has drawn-up its own list of its most important electricity using consumer products, a list that comprises refrigerators and air-conditioners. That list could be used as a reference to start with, but the ASEAN nations, China or other participating Asian nations might want to concentrate on others and decide in the light of their own needs.

Why starting with one/few product(s)?

1. it is practical; we have presently too much generalised cooperation good-will expressions and ever debated grand strategies
2. it is time to proceed to the act – Asia is burning-up a lot of that energy
3. experience proves it is faster to start small
4. it allows partners to test and improve their co-operation process design while advancing by trial and error. Then it can be applied '*mutatis mutandis*' to other sectors.
5. it is sufficiently low profile not to raise too much political resistance or resistance of the politically motivated national administrators/administrations. A limited cooperation experiment should pass easier.
6. finally –for what ever it is worth - small is beautiful.

The 'start'- product should be decided by consensus. If that consensus needs more than one product, so be it, but the number has to be small. The second step would then be to develop jointly the energy/electricity characteristics of that

product. That process can also cover in parallel safety or environmental aspects – if it does not delay the process on energy efficiency. It has the additional attraction of allowing creation of ‘modern’ concepts such as life-cycle energy use of products, a concept e.g. Japan does not yet have on her rulebooks, but might be interested to introduce in the light of the EU experience with the recent adoption of the so called EuP Directive (Directive 2005/32/EC on the eco-design of Energy-using Products) and its implementation. In the light of the experience and trial and error process for the first product(s) Asian partners and the EU then would advance to cover further products/product groups.

Asian countries that would be invited for participating in this pluri-lateral co-operation project should be all the ASEAN nations and China. The other four big ‘Asian’ players, Korea, India, Australia, New Zealand and - because of its regional interest - the US need to have their legitimate WTO protected trade interests under the TBT respected. That goes without saying. As far as India is concerned, once the present project - in itself already covering with ASEAN and China a wide geographical area and a considerable number of negotiating partners - has taken shape, India should be considered as the next candidate for Japan-EU cooperation on energy efficiency. Doing it at the same time might prove to be overloading the boat. Others might want to join at their leisure and would be invited to/accepted in the light of what the actual project can absorb without losing momentum.

One would have to assume that the US would observe this cooperation carefully for commercial reasons but also because of its political interests in the area. Fortunately the US has decided after many years of being an uncooperative player in the international energy saving discussions, to end its self-isolation and embrace energy saving and green-house-gas emission reduction. While President Bush has announced a policy change on 31 May, just in time for the Heiligendamm G8 Summit, even before that date on 29th May the US government through a study published by the US Agency for International Development (USAID) has suggested ‘to help Asian economies to use and develop more ‘energy efficient appliances and ‘clean coal technologies’ (FT 30/05/07). If that declaration of intent is followed by action, than a certain amount of co-ordination, avoidance of overlap and wasteful competition is called for. It is re-assuring to see that the US is now publicly acknowledging what everyone knew since long, namely that an Asia that is more effective in its energy use is in the final analysis an economic growth protecting factor for the rest of the world instead of being a drag. But one has to be realistic and assume that even with a modest project as the one suggested here, the US would react and one would have to think how to keep the US happy, or at least at bay, without jeopardising the project.

Next Steps

AIE Asia Institute Europe has very recently finished a study for a Japanese client on “EU-Japan Energy Efficiency Cooperation for Asia, with particular reference to China and ASEAN - A Scoping Analysis” for which an earlier version of this paper served as an input. AIE’s first modest scoping study should ideally serve for starting an awareness raising process with the respective political institutions (administrations, parliaments, governments incl. possibly EU member states and the EU Commission) and the business communities in Japan and in the EU. As mentioned above it has already served as an input in the EU-Japan Business Dialogue Round Table. The awareness raising process should lead into political debate and decision making on both sides and then subsequently or in parallel would have to be brought to the Asian nations to gather their reactions and input. A kind of pluri-governmental framework would most likely be necessary in which discussions/ consultations/ negotiations would take place. This process needs to be carefully thought through and ‘designed’. The ‘Design’ should help starting and accompanying the political and intergovernmental exchange process. It probably would have to start with outlining the sequence of planned activities/meetings/exchanges and have a time vector and a critical path. It should also look at ‘process accompanying/ catalysing activities’ that would include organising events, meetings and gatherings, providing platforms for informal encounters at different levels for an exchange of views and information, in short something one might want to call ‘analog track two’ referring to what the political negotiators use regularly in their processes. Certainly there would a need for accompanying neutral, independent research of relevant issues. Almost equally certain at one stage or another, go-between services in case of difficulties and independent opinion/ evaluation of the process will be needed.

AIE Asia Institute Europe is now proposing to take on the second, the ‘Design’ phase as well as the ‘Analog Track Two’ part. Its members and associates have reflected thoroughly on EU-Japan cooperation in the energy field and made contact in Japan with competent research institutions that have expressed interest to cooperate. AIE has secured the participation of a top-ranking German expert on energy efficiency. All what is needed, like always is a powerful/potent public and/or private sponsor or sponsors. Anyone volunteering?

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