Stockholm region position concerning the European Commission's consultation on financial support for energy efficiency in buildings

This document has been produced by the Stockholm Region Association for European Affairs (SEF) comprising the City of Stockholm, the Stockholm County Association of Local Authorities and Stockholm County Council as constituent members. Other members are the Uppsala Regional Council, the Sörmland Regional Council, the Västmanland Association of Local Authorities and County Council, The Council for the Stockholm-Mälar Region and the Region of Gotland.

1. Addressing market failures

(a) Are the barriers identified in this document the most important ones? If not, which barriers are missing and why are they important?

As the Commission points out, there is an apparent gap between what is desirable in socio-economic terms at European and national level and what is economically feasible for building owners, not least because of the long pay-back periods for energy-efficiency investments in buildings. One solution might be to step up the use of Energy Performance Contracting (EPC)[1], through which measures with short pay-back periods finance investments with longer payback periods. EPC is however seldom used, and the result is that only less long-term measures and more short-term profitable energy-efficiency measures are implemented, which makes it more difficult to finance more long-term measures. This makes it harder to meet both the EU's energy targets and the Swedish Government's ambition of halving energy use in the Swedish building stock by 2050. The EU's public procurement legislation might also be an obstacle to contracting authorities wishing to use EPC.

The lack of knowledge concerning energy-efficient solutions is also an obvious problem, and one which can only be dealt with through improved energy advice at local level. Sweden has a system of grants for energy advice at local level, but that is however insufficient.

Increased energy costs have resulted in building owners taking measures to reduce the quantity of energy they buy, e.g. by installing various types of heat pumps. However, building owners have not managed to reduce the energy requirements of buildings to an equivalent extent. Training, information measures and financial incentives are needed to encourage such energy-efficiency measures to be taken.

[1] The Commission wrote the following on EPC: "Energy Performance Contracting (EPC) is an approach to financing energy efficiency measures that uses cost savings from reduced energy consumption to repay the cost of putting in place energy conservation measures. Typically, energy service companies (ESCOs) deliver these energy efficiency improvement measures in a user's facility and pay part or all of the upfront costs, which are paid back with the money saved on the energy bills. Despite the huge potential for energy services in Europe and hundreds of existing projects that have proven their effectiveness and flexibility, the market for such services is still underdeveloped."

(b) Which market failures would be most urgent to address? At what level (i.e. EU, national/ regional/ local) would these failures be best addressed?

The lack of information is the most pressing market failure and should be tackled at all levels. It is urgent that national (i.e. not primarily European) financial support be developed for building owners, e.g. low-interest loans or reduced tax following renovation involving a proven reduction in energy use. To safeguard project ownership, it is important that grants be complemented with joint financing. The Swedish system of paying national grants to municipalities so that they can employ energy advisers is a good example. However, the grant must be sufficient to meet demand, which is not the case today. In the City of Stockholm, for example, the national grant amounts to some 50 öre per inhabitant, while in small municipalities it is more than SEK 30 per inhabitant.

(c) How could these failures be best addressed? For example; how could behavioural change needed for quicker uptake of energy efficiency measures by society be triggered at the national level? How could the development of an energy services market for households be further stimulated? What could be done to increase awareness raising and promotion of energy efficiency in buildings? How could the business community (e.g. building sector, ESCOs, local banks, etc.) be better supported in delivering energy efficiency in buildings? How could the split incentive problem be best tackled?

Solutions might include:

- Lower taxation of energy-efficient buildings;
- National grants to municipalities to fund energy advice;
- Low-interest energy-efficiency loans;
- Measures to safeguard the operation of energy-efficiency investments made; the lack of qualified operating technicians is a problem;
- Improved energy statistics at national and European level in order to facilitate comparison and monitoring of the 20-20-20 targets.

2. Improving access to financing

(a) Are the current EU-level financial tools for energy efficiency in buildings effective? How could the uptake of EU-level funding for energy efficiency (including cohesion policy funding) be improved? As a complement to tailor-made national or regional financial instruments (e.g. set up with a contribution from cohesion policy funds), what could be the future role of centrally-managed financial instruments at EU level in this context?

Even if certain publicly owned building companies in the Stockholm region do not have any obvious need for EU financing, targeted support for public building companies might be worth considering, not least since they are supposed, under the EU Directive on the energy performance of buildings, to set an example in this area.

(b) How could more private financing (both from institutional investors as well as building owners) for energy efficiency projects be mobilised? What would be the role of public funding (both at EU and national level) in this context? Is access to (project development) technical assistance an issue and how could it be provided most efficiently at the national, regional and local level?

How could both national and EU financing schemes be improved to best cover all segments of the market (residential, commercial, public buildings, etc.)?

An important reason why energy-efficiency measures are not carried out in existing buildings is the difficulty of obtaining financing. One way of stimulating energy-efficiency measures might be to introduce a system of grants similar to the KLOT grant advocated by HSB [the Savings and Construction Association of Tenants]. The KLOT grant may be similar to the existing ROT grant but is aimed at helping building owners implement energy-saving renovations.

Banks and insurance companies previously showed a certain interest in environmentally certified buildings since environmental certification is actually a form of quality label on the product/building which in theory reduces the risk of claims. If we can get banks and insurance companies to offer interest and premium discounts for environmentally certified buildings, society will be encouraged to certify more buildings. It is at present possible to obtain environmental certification for both existing buildings and new-builds. Environmentally certified buildings are generally more energy-efficient than other buildings.

(c) Is there a need for guarantee systems related to building efficiency investments? If so, what guarantee systems for efficiency investments would be necessary and how should they be designed? Is there a need for other enabling mechanisms (e.g. risk-sharing, investment vehicles)?

There should be a guarantee system for financial support based on measuring the energy-savings obtained and not on an estimated result.

(d) How could the capacity, knowledge and risk perception regarding energy efficiency investments be improved, both at financial institutions as well as with private investors and administrations at all levels?

Through greater and better use of good examples, with both estimated and measured energy data.

(e) Are there examples of good practice at national or regional level (with data on costs and benefits) that could be applied more widely?

This is a recurrent question, and there is an apparent need for easily accessible databases containing good examples. In Sweden there is ”LÅGAN” (www.laganbygg.se), which is supported by the Swedish Energy Agency and the Swedish Construction Federation.

3. Strengthening the regulatory framework

(a) Is there any need for further EU-level regulation to stimulate energy efficiency investments in buildings beyond the Commission proposal for a new Energy Efficiency Directive? If so, what should these measures entail?

Stockholm Region believes that the point of departure for all EU rules should be that they respect the principles of subsidiarity and proportionality and defend local self-government, that the proposals should not go any further than is necessary, should give scope for flexibility and should be cost-effective.

Stockholm Region previously issued an opinion on the Energy Efficiency Directive and expressed reservations concerning a number of binding provisions, including Articles 4 and 5 of the proposal for a Directive. As stated above, EU measures to promote increased energy efficiency in the public sector should primarily be aimed at supporting voluntary efforts. The EU must defend local self-government.

In the proposal for a Directive on energy efficiency, the Commission is proposing a high level of regulation in an area in which Sweden has long applied general economic instruments in a progressive manner, not least in the area of the taxation of energy and carbon dioxide, which, through the impact they have on prices, provide an incentive for greater energy efficiency. The Stockholm Region wishes to meet the energy-efficiency targets without binding rules on how that should happen. Some examples of this work are presented below.

(b) What could be specific measures to be taken at national level to implement and complement most effectively the EU-level regulatory framework for energy efficiency?

Public building owners are able, on the basis of owner's house rules, to prescribe more long-term energy requirements in comparison to national standards. Municipalities can also set higher energy standards for new-builds on municipal land. This is an important driving force for new building technology. For example, the 2012-2015 environmental programme of the City of Stockholm stipulates that newly constructed buildings must have an energy consumption of no more than 55 kWh/$m^{2.}$

(c) What are the specific needs for policy guidance and awareness raising among different stakeholder groups?

Building management requires long-term instruments because energy-saving investments are implemented on a very long-term basis. It is also important that information concerning and communication of decisions and the reasons for them reach building owners.

A detailed debate at political level also continues to be necessary in order to push development forward and meet the target.

GOOD EXAMPLES OF ENERGY EFFICIENCY MEASURES IN THE BUILDING STOCK OF THE STOCKHOLM REGION

As stated above, Stockholm Region would like to stress that it is possible to promote future-oriented energy-efficiency improvements in the building stock without additional EU regulation. Below we give a number of examples in this area:

The Energy Efficiency Programme (PFE)[2]

The Swedish Energy Agency is implementing an Energy Efficiency Programme (PFE) in the industrial sector involving tax relief in return for measures carried out. Seen from the perspective of cost efficiency, this programme has proved to be very effective.

[2] For more information on the PFE: www.energimyndigheten.se/pfe

BELOK Total Concept[3]

One method of finding an effective way of presenting suitable energy measures is the BELOK Total Concept, which is financed by the Swedish Energy Agency. This has been tested on twenty or so buildings in Sweden with good results. BELOK's mission is to be an objective party and to pursue development projects involving energy efficiency and environmental issues as a common denominator among its members in their buildings. The project involves the testing of new methods, instrument tools, products and systems in real life together with its members.

Stockholm Royal Seaport *[Norra Djurgårdsstaden]*[4]

Stockholm Royal Seaport, one of the very largest development projects of the City of Stockholm, has a pronounced environmental profile with very ambitious aims regarding energy-use. 10,000 homes and 30,000 jobs are being created in a climate-friendly manner in this city district. Buildings and infrastructure are being constructed on the basis of sustainable energy solutions, closed-loop systems and smart environmental design, and the area has been adapted to future climate changes. All systems, installations and products used in buildings, infrastructure and transport will have a documented very low energy standard, which will be verified before they are introduced into the area.

Hållbara Järva[5]

One of the City of Stockholm's greatest challenges is to make its building stock built during the "Miljonprogram" housing programme of the 1970s more energy efficient. A concrete example of efforts in this regard is the "Sustainable Järva" project. Seven selected "Miljonprogram" housing blocks in Husby, Akalla and Rinkeby are being made more energy efficient whilst being renovated. The energy-efficiency measures will lead, *inter alia*, to energy consumption being cut by half, a 10% reduction in domestic electricity use, a 30% reduction in energy use on building sites, and tests and comparisons relating to site-built and prefabricated technology for the additional insulation of facades. Following assessment and further development, these methods are now used in large parts of the "Miljonprogram" building stock of the Swedish Housing Company (Svenska Bostäders) in the City of Stockholm. Once the project is completed, it is estimated that the concept will have been used in 1,500 of the apartments of Svenska Bostäders. The project could also be replicated in millions of homes throughout Europe.

Stockholmhem's air source heat pumps

Stockholmshem, the housing company of the City of Stockholm, is working in a very target-oriented fashion to reduce energy consumption in existing buildings, and primarily in the building stock constructed from the 1940s to the 1970s, on the basis of having a clear strategy, setting targets and monitoring energy consumption. These measures, which affect some 20,000 homes, focus on optimising the technical installations of buildings, enhancing the building envelope, improving the quality of windows, implementing water-saving measures and installing air source heat recovery equipment. Air source heat pumps in particular, which nowadays are very energy efficient, are contributing to the largest savings of approximately 35%. The estimated pay-back period for the heat pumps is approximately seven years. The combined measures are giving rise to savings of some 50% of the energy bought for the buildings in question. The concept is simple and can be implemented in a very large number of buildings with conditions similar to those in Sweden. It also gives rise to a halving of CO_2 emissions.

[3] For more information on BELOK: www.belok.se/belok.php?belok
[4] For more information on Stockholm Royal Seaport: www.stockholm.se/norradjurgardsstaden
[5] For more information on Sustainable Järva: www.stockholm.se/hallbarajarva

The Bostadsrättsföreningen Riddarsporren housing association in Norrtälje[6]

Bostadsrättsföreningen Riddarsporren was built in 1970. It comprises 168 apartments and premises for day nurseries and association activities. From the outset, the association had its own central boiler for the supply of heat, but in 1995 this was converted to distance-heating. Ventilation was air source without heat recovery. The seven buildings have a total surface area of 11,000m². Renovation work was launched in 2003. The energy-efficiency measures carried out on the buildings included a new building automation system, the adjustment of the heating system, a new ventilation unit with heat recovery and needs-related control, the insulation of window joists, individual adjustment in apartments and optimised operation/media follow-up. These measures resulted in energy savings of 36%.

The Bostadsrättsföreningen Väduren housing association in Haninge[7]

Bostadsrättsföreningen Väduren is Sweden's second largest housing association with some 900 apartments built in the period 1968-71. Its total surface area is 69,000m². Renovation work began in 1998 with measures including a new building automation system, compulsory ventilation control measures, ventilation with needs-related control, water-saving measures, electricity purchasing and optimised operation/media follow-up. These measures resulted in energy savings of 21%.

Energy-saving project of Micasa Fastigheter[8]

Micasa Fastigheter, the property company of the City of Stockholm, implemented a major energy-saving project in the period 2009-2011. In total, the company invested SEK 250 million in 34 buildings. The aim was to reduce energy use in buildings by 30%, and this target was indeed met. As part of the project, six oil-heated buildings were converted to geothermal heating. Ventilation measures were implemented in 25 buildings.

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On behalf of the Stockholm Region Association for European Affairs (SEF)

Sten Nordin
Chairman

(This is a translation of the original statement in Swedish)

[6] For more information on Riddarsporren: www.brfriddarsporren.se
[7] For more information on Väduren: www.vaduren.se
[8] For more information on the Micasa energy-saving project: www.micasa.se/Om-Micasa/Miljo/Micasas-energiarbete/Energisparprojektet/