

European Action Plan for Public and Private Property Owners of Housing

Background

At the end of the TRAINREBUILD Project, national Action Plans were drafted by property owners' associations in order to reflect the feedback collected during the trainings and plan further actions to foster energy efficiency refurbishments in Europe beyond the project. This European Action Plan is a summary and conclusions from the national action plans. It aims to give a consolidated overview for all the participating countries and put forward additional suggestions/recommendations to scale up renovation in the EU, while at the same time assisting member states in drafting their renovation roadmaps under the Energy Efficiency Directive.

Main Elements of the Action Plan

1. Make use of EU Regulations to foster dialogue with public authorities

EU Regulations & Directives are indeed excellent leverages for property owners associations interested to dialogue and partner with Member States, Regions, Cities as well as field for cooperation between property owners communities and associations.

At European level, a yearly review of the action plan should take place in the form of a European Forum event (first session envisaged in the framework of the EUSEW 2013). At this occasion, the elements of the action plan to implement EU directives related to retrofit from a property owner perspective would be addressed. This Forum will be directed to property owners AND local authorities in particular to set up more partnerships between local authorities and communities of individual property owners.

The European TRAINREBUILD Forum recommendations will nourish the directives implementation strategy to be debated during the Forum 2013.

2. Promote National Action Plans

The way property owners can/are designing an action plan varies very much from Member State to Member State depending in particular on the following issues. Existing initiatives listed in the national action plans are mentioned here as a source of inspiration.

2.1. Is there a Member State action plan which gives a framework?

- Belgium: new accounting plan for co-owned buildings
- France: Plan Grenelle Bâtiment
- United Kingdom: Green Deal

2.2. In this framework, is there a data gathering system?

- France: National Observatory Effinergie
- United Kingdom: Green Deal Assessment

2.3. Are there regional initiatives which provide leverages?

- Belgium: regional coaching system
- France: trainings

2.4. Are there financial schemes supporting retrofit initiatives

- Belgium: regional subsidies
- Germany: KfW

2.5. Are there leading Cities, Member or not Members of the Covenant of Mayors, acting with and supporting property owners initiatives to retrofit?

- Belgium: Brussels Energy EfficiencyHouse
- France: pilot partnerships Cities-condominiums
- Germany: KIQ- Kooperation in Quartier
- Greece: invitation of the Cities to the local property owners meetings, CRES center for renewable energies
- Portugal: Renewable Energy Agency

2.6. Are the property owners association decentralised structure combined with a national retrofit coordination strategy and/or initiative?

- France: Total/UNPI/Econormeshabitat
- Italy: ENzymes

2.7. Are there professionals offering new services helping property owners?

- Belgium, France: coach for pilot retrofit
- UK: Integrated housing renovation services

2.8. Is at member state level, a Web 2.0 strategy in place focused on retrofit by property owners?

- France: UNPI website will be rebuild

3. Property Owners, Smart Ready

Property owners are confronted with the opportunities and challenges of four 'revolutions' already explored in other IEE projects which need to be part of the European Action Plan:

- Smart energy user (technologies and financing scheme)
- Smart monitoring of energy consumption and data gathering at City level, which impacts directly the Strategy to monitor the number of retrofit plans per year by individual owner and the energy saved/generated by the retrofit plans per year
- Smart retrofit and Web 2.0 (viral marketing of smart retrofit techniques) which impacts directly the strategy to disseminate the service package
- Smart communities, property owner in his/her local environment and City

4. Co-Owners of Multi-Family Apartments Buildings Strategy

An European informal platform will be created with its 'online portal': 'Greencondo.eu'/Coproverte.eu

4.1. Objectives

The aim of the platform will be to:

- Bring together « condo partners» at EU level
- Mobilize, train and support co-owners in their efforts for energy retrofitting and new forms of citizenship
- Contribute to the implementation of EU directives in the field of energy renovation of co-owned buildings
- Promote the development at European level eco-condominium
- Participate to the European Commission's Smart Cities and Communities Stakeholder Platform (<http://www.eu-smartcities.eu>)

4.2. Members

The platform will be composed of:

- Regions, Provinces, Cities, Towns, National, Regional and local energy agencies
- Co-owners
- Multi-Apartment Buildings managers
- Professionals of the Building and Energy Sectors
- Banks and Insurances

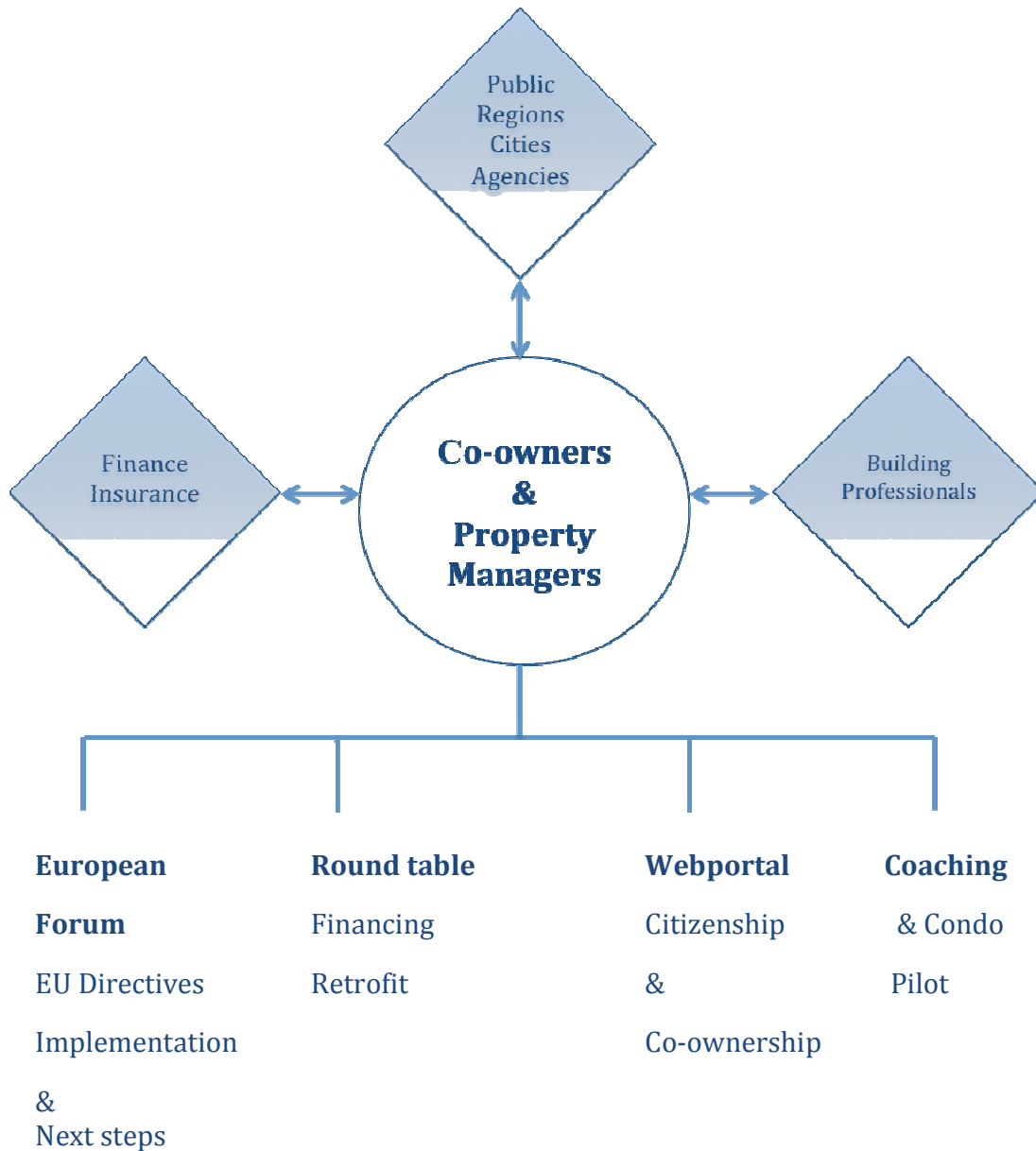
Founding members to be considered (the list is to be completed in view of a kick off meeting in February 2013):

- Regions, Towns, Agencies: Region of Ile de France, Région Bruxelles-Capitale, FEDARENE, Energy Cities, ARENE-Ile de France, IBGE-Bruxelles, Agence Parisienne du Climat, Ecocity-Nantes, REC, Town of Cascais, Region of Catalonia
- Owners : UIPI, ARC, associations in EU Member States interested
- Property managers: CEPI, FNAIM, ABSA
- Professionals of the building sector: EuroAce members, Afortech, GCCP-France, Deep Renovation Coalition, Bouygues, Suez, TCE-France, RICS

- Banks & Insurances: Insurance-Credit Namur, BPCE

4.3. Financing

This platform will be funded thanks to the membership fee granted by its members and/or through the contracts to be signed for its implementation for 2013-2014.



EU Regulations & Directives to frame a property owners action plan

- I. DIRECTIVE 2006/32/EC - on energy end-use efficiency and energy services and repealing Council Directive 93/76/EEC
- II. Directive 2002/91/CE - on the energy performance of buildings
- III. DIRECTIVE 2010/31/EU - on the energy performance of buildings (recast)
- IV. Directive 2009/28/EC of the European Parliament and of the Council of 23 April 2009 on the promotion of the use of energy from renewable sources and amending and subsequently repealing Directives 2001/77/EC and 2003/30/EC Text with EEA relevance
- V. REGULATION (EU) No 244/2012 - on the energy performance of buildings (supplementing Directive 2010/31/EU)
- VI. European Parliament legislative resolution of 11 September 2012 on the proposal for a directive of the European Parliament and of the Council on energy efficiency and repealing Directives 2004/8/EC and 2006/32/EC (COM(2011)0370 – C7-0168/2011 – 2011/0172(COD))
- VII. European TRAINREBUILD Forum 1,2,3,4

EU Objectives 2020-2050

By 2020, the European Union has set clear target to tackle climate change and lower energy consumption:

- At least 20 % reduction in greenhouse gas emissions compared to 1990 (30% if international conditions are right, European Council, 10-11 December 2009);
- Saving of 20 % of EU energy consumption compared to projections for 2020;
- 20 % share of renewable energies in EU energy consumption, with 10% share in transport.

Human activities attributed to the energy sector cause as much as 78 % of the Community greenhouse gas emissions. The residential and tertiary sector, the major part of which is buildings, accounts for more than 40 % of final energy consumption in the Community and is expanding, a trend which is bound to increase its energy consumption and hence also its carbon dioxide emissions. Thus, buildings constitute a real prospect to achieving one of the Union objectives compiled in the Energy Roadmap 2050: reducing greenhouse gas emissions by 80-95 % by 2050 compared to 1990.

Besides, this roadmap recommends a high use of Renewable energy sources (RES) for electricity production and will support measures for RES leading to a share of 75% of RES in gross final energy consumption and a share of RES in electricity consumption reaching 97% by 2050.

1. DIRECTIVE 2006/32/EC - on energy end-use efficiency and energy services and repealing Council Directive 93/76/EEC

In the Community there is a need for improved energy end-use efficiency, managed demand for energy and promotion of the production of renewable energy, as there is relatively limited scope for any other influence on energy supply and distribution conditions in the short to medium term, either through the building of new capacity or through the improvement of transmission and distribution.

1.1. Electricity Pricing. This Directive requires that Member States ensure that all household customers and, where Member States deem it appropriate, small enterprises, enjoy universal service, that is the right to be supplied with electricity of a specified quality within their territory at reasonable, easily and clearly comparable, and transparent prices.

1.2. Voluntary agreements. The energy services, energy efficiency improvement programmes and other energy efficiency improvement measures put into effect to reach the energy savings target may be supported and/or implemented through voluntary agreements between stakeholders and public sector bodies appointed by the Member States.

In order to enable final consumers to make better informed decisions as regards their individual energy consumption, they should be provided with a reasonable amount of information thereon and with other relevant information, such as information on available energy efficiency improvement measures, comparative final consumer profiles or objective technical specifications for energy-using equipment, which may include 'Factor Four' or similar equipment.

To that end, the voluntary agreements shall have clear and unambiguous objectives, and monitoring and reporting requirements linked to procedures that can lead to revised and/or additional measures when the objectives are not achieved or are not likely to be achieved. With a view to ensuring transparency, the voluntary agreements shall be made available to the public and published prior to application to the extent that applicable confidentiality provisions allow, and contain an invitation for stakeholders to comment.

1.3. Energy Audit. Member States shall ensure the availability of efficient, high-quality energy audit schemes which are designed to identify potential energy efficiency improvement measures and which are carried out in an independent manner, to all final consumers, including smaller domestic, commercial and small and medium-sized industrial customers.

1.4. Metering. Member States shall ensure that, in so far as it is technically possible, financially reasonable and proportionate in relation to the potential energy savings, final customers for electricity, natural gas, district heating and/or cooling and domestic hot water are provided with competitively priced individual meters that accurately reflect the final customer's actual energy consumption and that provide information on actual time of use.

When an existing meter is replaced, such competitively priced individual meters shall always be provided, unless this is technically impossible or not cost-effective in relation to the estimated potential savings in the long term.

1.5. Reporting. Member States shall assign to one or more new or existing authorities or agencies the overall control and responsibility for overseeing the framework set up in relation to the target mentioned in paragraph 1. These bodies shall thereafter verify the energy savings as a result of energy services and other energy efficiency improvement measures, including existing national energy efficiency improvement measures, and report the results. After having reviewed and reported on the first three years of application of this Directive, the Commission shall examine whether it is appropriate to come forward with a proposal for a directive to further develop the market approach in energy efficiency improvement by means of white certificates.

Member States has or will submit to the Commission the following EEAPs:

- a first EEAP not later than 30 June 2007;
- a second EEAP not later than 30 June 2011;
- a third EEAP not later than 30 June 2014.

All EEAPs shall describe the energy efficiency improvement measures planned to reach the targets set out in Article 4(1) and (2), as well as to comply with the provisions on the exemplary role of the public sector and provision of information and advice to final customers set out in Articles 5(1) and 7(2) respectively.

The third EEAPs shall:

- include a thorough analysis and evaluation of the preceding EEAP;
- include the final results with regard to the fulfilment of the energy savings targets set out in Article 4(1) and (2);
- include plans for — and information on the anticipated effects of — additional measures which address any existing or expected shortfall vis-à-vis the target;
- in accordance with Article 15(4), use and gradually increase the use of harmonised efficiency indicators and benchmarks, both for the evaluation of past measures and estimated effects of planned future measures;
- be based on available data, supplemented with estimates.

I. Directive 2002/91/CE - on the energy performance of buildings

A common approach for calculating the energy performance of buildings in the EU will introduce transparency for prospective owners or users with regard to the energy performance in the Community property market.

Major renovations of existing buildings above a certain size should be regarded as an opportunity to take cost effective measures to enhance energy performance. Major renovations are cases where the total cost for renovations is higher than 25 % of the value of the building, excluding the value of the land upon which the building is situated, or those where more than 25 % of the building shell undergoes renovation.

However, the improvement of the overall energy performance of an existing building does not necessarily mean a total renovation of the building but could be confined to those parts that are most relevant for the energy performance of the building and are cost-effective.

The energy performance of buildings should be calculated on the basis of a methodology, which may be differentiated at regional level, that includes, in addition to thermal insulation other factors that play an increasingly important role such as heating and air-conditioning installations, application of renewable energy sources and design of the building.

Recent years have seen a rise in the number of air-conditioning systems in southern European countries. In order to avoid peak load times and the increase in electricity prices, there should be further development of passive cooling techniques, primarily those that improve indoor climatic conditions and the microclimate around buildings.

Regular maintenance of boilers and of air-conditioning systems by qualified personnel contributes to maintaining their correct adjustment in accordance with the product specification and in that way will ensure optimal performance from an environmental, safety and energy point of view.

2.1. Audit. An independent assessment of the total heating installation is appropriate whenever replacement could be considered on the basis of cost-effectiveness.

2.2. Billing. As far as landlords are concerned, the billing to occupants of buildings, of the costs of heating, air-conditioning and hot water, shall be calculated in proportion to actual consumption, could contribute towards energy saving in the residential sector. Occupants should be enabled to regulate their own consumption of heat and hot water, in so far as such measures are cost effective.

2.3. Energy Performance Certificate. Member States shall ensure that, when buildings are constructed, sold or rented out, an energy performance certificate is made available to the owner or by the owner to the prospective buyer or tenant, as the case might be. The validity of the certificate shall not exceed 10 years. The energy performance certificate for buildings shall include reference values such as current legal standards and benchmarks in order to make it possible for consumers to compare and assess the energy performance of the building. The certificate shall be accompanied by recommendations for the cost-effective improvement of the energy performance.

II. DIRECTIVE 2010/31/EU - on the energy performance of buildings (recast)

Major renovations of existing buildings, regardless of their size, provide an opportunity to take cost-effective measures to enhance energy performance. For reasons of cost-effectiveness, it should be possible to limit the minimum energy performance requirements to the renovated parts that are most relevant for the energy performance of the building.

3.1. Major renovation. Member States should be able to choose to define a ‘major renovation’ either in terms of a percentage of the surface of the building envelope or in terms of the value of the building. If a Member State decides to define a major renovation in terms of the value of the building, values such as the actuarial value, or the current value based on the cost of reconstruction, excluding the value of the land upon which the building is situated, could be used.

3.2. Energy performance certificate recommendations. For landlords, the prospective buyer and tenant of a building or building unit should, in the energy performance certificate, be given correct information about the energy performance of the building and practical advice on improving such performance.

Indeed, the energy performance certificate shall provide an indication as to where the owner or tenant can receive more detailed information, including as regards the cost-effectiveness of the recommendations made in the energy performance certificate. The evaluation of cost effectiveness shall be based on a set of standard conditions, such as the assessment of energy savings and underlying energy prices and a preliminary cost forecast. In addition, it shall contain information on the steps to be taken to implement the recommendations. Other information on related topics, such as energy audits or incentives of a financial or other nature and financing possibilities may also be provided to the owner or tenant.

Member States shall require that, when buildings or building units are constructed, sold or rented out, the energy performance certificate or a copy thereof is shown to the prospective new tenant or buyer and handed over to the buyer or new tenant are offered for sale or for rent, the energy performance indicator. Indeed, the energy performance certificate of the building or the building unit, as applicable, is stated in the advertisements in commercial media also.

These provisions shall be implemented in accordance with applicable national rules on joint ownership or common property.

3.3. System requirements shall be set for new, replacement and upgrading of technical building systems and shall be applied in so far as they are technically, economically and functionally feasible. The system requirements shall cover at least the following:

- Heating systems;
- Hot water systems;
- Air-conditioning systems;
- Large ventilation systems;
- Or a combination of such systems.

3.4. Inspection. Owners shall take into account that Member States shall lay down the necessary measures to establish a regular inspection of the accessible parts of systems used for heating buildings, such as the heat generator, control system and circulation pump(s), with boilers of an effective rated output for space heating purposes of more than 20 kW. That inspection shall include an assessment of the boiler efficiency and the boiler sizing compared with the heating requirements of the building. The assessment of the boiler sizing does not have to be repeated as long as no changes were made to the heating system or as regards the heating requirements of the building in the meantime.

Heating systems with boilers of an effective rated output of more than 100 kW shall be inspected at least every two years.

Member States shall lay down the necessary measures to establish a regular inspection of the accessible parts of air-conditioning systems of an effective rated output of more than 12 kW. The inspection shall include an assessment of the air-conditioning efficiency and the sizing compared to the cooling requirements of the building. The assessment of the sizing does not have to be repeated as long as no changes were made to this air-conditioning system or as regards the cooling requirements of the building in the meantime.

Furthermore, an inspection report shall be issued after each inspection of a heating or air-conditioning system. The inspection report shall contain the result of the inspection performed in accordance with Article 14 or 15 and include recommendations for the cost-effective improvement of the energy performance of the inspected system.

The inspection report shall be handed over to the owner or tenant of the building.

3.5. Methods and practices that serve to enhance energy performance. Member States shall take the necessary measures to inform the owners or tenants of buildings or building units of the different methods and practices that serve to enhance energy performance. They shall in particular provide information to the owners or tenants of buildings on energy performance certificates and inspection reports, their purpose and objectives, on cost-effective ways to improve the energy performance of the building and, where appropriate, on financial instruments available to improve the energy performance of the building.

3.6. Reporting. The Commission shall by 31 December 2012 and every three years thereafter publish a report on the progress of Member States in increasing the number of nearly zero-energy buildings. On the basis of that report the Commission shall develop an action plan and, if necessary, propose measures to increase the number of those buildings and encourage best practices as regards the cost-effective transformation of existing buildings into nearly zero-energy buildings.

- III. Directive 2009/28/EC of the European Parliament and of the Council of 23 April 2009 on the promotion of the use of energy from renewable sources and amending and subsequently repealing Directives 2001/77/EC and 2003/30/EC Text with EEA relevance

At national and regional level, rules and obligations for minimum requirements for the use of energy from renewable sources in new and renovated buildings have led to considerable increases in the use of energy from renewable sources. Those measures should be encouraged in a wider Community context, while promoting the use of more energy-efficient applications of energy from renewable sources through building regulations and codes.

Member States shall recommend to all actors, in particular local and regional administrative bodies to ensure equipment and systems are installed for the use of electricity, heating and cooling from renewable energy sources and for district heating and cooling when planning, designing, building and renovating industrial or residential areas. Member States shall, in particular, encourage local and regional administrative bodies to include heating and cooling from renewable energy sources in the planning of city infrastructure, where appropriate.

Member States shall use energy or eco-labels or other appropriate certificates or standards developed at national or Community level, where these exist, as the basis for encouraging such systems and equipment.

Passive energy systems use building design to harness energy. This is considered to be saved energy. To avoid double counting, energy harnessed in this way should not be taken into account for the purposes of this Directive.

It may be appropriate for Member States, in order to facilitate and accelerate the setting of minimum levels for the use of energy from renewable sources in buildings, to provide that such levels are achieved by incorporating a factor for energy from renewable sources in meeting minimum energy performance requirements under Directive 2002/91/EC, relating to a cost-optimal reduction of carbon emissions per building.

By 31 December 2014, Member States shall, in their building regulations and codes or by other means with equivalent effect, where appropriate, require the use of minimum levels of energy from renewable sources in new buildings and in existing buildings that are subject to major renovation. Member States shall permit those minimum levels to be fulfilled, inter alia, through district heating and cooling produced using a significant proportion of renewable energy sources.

Regular reporting is needed to ensure a continuing focus on progress in the development of energy from renewable sources at national and Community level. It is appropriate to require the use of a harmonised template for national renewable energy action plans which Member States should submit. Such plans could include estimated costs and benefits of the measures envisaged, measures relating to the necessary extension or reinforcement of the existing grid infrastructure, estimated costs and benefits to develop energy from renewable sources in excess of the level required by the indicative trajectory, information on national support schemes and information on their use of energy from renewable sources in new or renovated buildings.

IV. REGULATION (EU) No 244/2012 - on the energy performance of buildings

Supplementing Directive 2010/31/EU and gives methods for calculation for experts.

- V. European Parliament legislative resolution of 11 September 2012 on the proposal for a directive of the European Parliament and of the Council on energy efficiency and repealing Directives 2004/8/EC and 2006/32/EC (COM(2011)0370 – C7-0168/2011 – 2011/0172(COD))

6.1. Finance. Member States should establish a long-term strategy beyond 2020 for mobilising investment in the renovation of residential and commercial buildings with a view to improving the energy performance of the building stock. Indeed, the rate of building renovation needs to be increased to achieving the Union objective of reducing greenhouse gas emissions by 80-95 % by 2050 compared to 1990.

6.2. Smart Meters. When designing energy efficiency improvement measures, account should be taken of efficiency gains and savings obtained through the widespread application of cost-effective technological innovations such as smart meters. Where smart meters have been installed, they should not be used by companies for unjustified back billing.

In relation to electricity, where the roll-out of smart meters is assessed positively, at least 80 % of consumers should be equipped with intelligent metering systems by 2020.

Use of individual meters or heat cost allocators for measuring individual consumption of heating in multi-apartment buildings supplied by district heating or common central heating is beneficial when final customers have a means to control their own individual consumption. Therefore, their use makes sense only in buildings where radiators are equipped with thermostatic radiator valves.

In some multi-apartment buildings supplied by district heating or common central heating, the use of accurate individual heat meters would be technically complicated and costly due to the fact that the hot water used for heating enters and leaves the apartments at several points. It can be assumed that individual metering of heat consumption in multi-apartment buildings is, nevertheless, technically possible when the installation of individual meters would not require changing the existing in-house piping for hot water heating in the building. In such buildings, measurements of individual heat consumption can then be carried out by means of individual heat cost allocators installed on each radiator.

Directive 2006/32/EC requires Member States to ensure that final customers are provided with competitively priced individual meters that accurately reflect their actual energy consumption and provide information on actual time of use. In most cases, this requirement is subject to the conditions that it should be technically possible, financially reasonable, and proportionate in relation to the potential energy savings. When a connection is made in a new building or a building undergoes major renovations, as defined in Directive 2010/31/EU, such individual meters should, however, always be provided. Directive 2006/32/EC also requires that clear billing based on actual consumption should be provided frequently enough to enable consumers to regulate their own energy use. However, there is also a need to clarify the requirements for access to information and fair and accurate billing based on actual consumption in cases where smart meters will not be available by 2020, including in relation to metering and billing of individual consumption of

heating, cooling and hot water in multi-unit buildings supplied by district heating/cooling or own common heating system installed in such buildings.

6.3. Cogeneration. To increase transparency for the final customer to be able to choose between electricity from cogeneration and electricity produced by other techniques, the origin of high-efficiency cogeneration should be guaranteed on the basis of harmonised efficiency reference values. Guarantee of origin schemes do not by themselves imply a right to benefit from national support mechanisms. It is important that all forms of electricity produced from high-efficiency cogeneration can be covered by guarantees of origin. Guarantees of origin should be distinguished from exchangeable certificates.

6.4. Energy Audit. Member States shall promote the availability to all final customers of high quality energy audits which are cost-effective and:

(a) carried out in an independent manner by qualified and/or accredited experts according to qualification criteria; or

(b) implemented and supervised by independent authorities under national legislation.

The energy audits referred to in the first subparagraph may be carried out by in-house experts or energy auditors provided that the Member State concerned has put in place a scheme to assure and check their quality, including, if appropriate, an annual random selection of at least a statistically significant percentage of all the energy audits they carry out.

6.5. Environmental Audit. Energy audits may stand alone or be part of a broader environmental audit. Member States may require that an assessment of the technical and economic feasibility of connection to an existing or planned district heating or cooling network shall be part of the energy audit.

6.6. Multi-apartment buildings. Where multi-apartment buildings are supplied from district heating or cooling, or where own common heating or cooling systems for such buildings are prevalent, Member States may introduce transparent rules on the allocation of the cost of thermal or hot water consumption in such buildings to ensure transparency and accuracy of accounting for individual consumption. Where appropriate, such rules shall include guidelines on the way to allocate costs for heat and/or hot water that is used as follows:

(a) hot water for domestic needs;

(b) heat radiated from the building installation and for the purpose of heating the common areas (where staircases and corridors are equipped with radiators);

(c) for the purpose of heating apartments.

Member States shall ensure that final customers receive all their bills and billing information for energy consumption free of charge and that final customers also have access to their consumption data in an appropriate way and free of charge.

Notwithstanding paragraph 1, the distribution of costs of billing information for the individual consumption of heating and cooling in multi-apartment and multi-purpose buildings pursuant to Article 9(3) shall be carried out on a non-profit basis. Costs resulting from the assignment of this task to a third party, such as a service provider or the local energy supplier, covering the measuring, allocation and accounting for actual individual consumption in such buildings, may be passed onto the final customers to the extent that such costs are reasonable.

6.7. National Strategy. Member States shall take appropriate measures to promote and facilitate an efficient use of energy by small energy customers, including domestic customers. These measures may be part of a national strategy. For the purposes of paragraph 1, these measures shall include one or more of the elements listed under point (a) or (b):

A range of instruments and policies to promote behavioural change which may include:

- (i) fiscal incentives;
- (ii) access to finance, grants or subsidies;
- (iii) information provision;
- (iv) exemplary projects;
- (v) workplace activities;

Ways and means to engage consumers and consumer organisations during the possible roll-out of smart meters through communication of:

- (i) cost-effective and easy-to-achieve changes in energy use;
- (ii) information on energy efficiency measures.

Member States shall take adequate measures for efficient district heating and cooling infrastructure to be developed and/or to accommodate the development of high-efficiency cogeneration and the use of heating and cooling from waste heat and renewable energy sources in accordance with paragraphs 1, 5, and 7.

Member States shall facilitate the establishment of financing facilities, or use of existing ones, for energy efficiency improvement measures to maximise the benefits of multiple streams of financing.