WORLD GREEN BUILDING COUNCIL
Europe Regional Network

Annex 2
Existing Financial Structures in Europe that support energy efficiency and/or RES uptake into buildings

WORLD GBC AND THE EUROPE NETWORK

As the largest international organisation influencing the global green building market, the World Green Building Council (World GBC) is the collective voice of more than 85 established, emerging, prospective and associated green building councils around the world.

The World GBC Europe Network is the largest and fastest growing of our regional networks, with more than 30 GBCs at various stages of development, including seven established GBCs. The Europe Network's collective mission is to transform the building and construction industry. Together, we are furthering policy and education initiatives, and building capacity within the European region to create a greener future.

The Europe Policy Taskforce has identified green finance as a policy priority. **This paper is a reference document for GBCs and their members**. It serves as an overview of existing green finance structures in Europe, specifically those facilitating funding for energy efficiency in the built environment. The hope is that it will be a helpful background piece for national GBCs to collect evidence with their membership on the successes and failures of such structures within their own countries, while giving a broad idea of how these relate to what is in place in other countries in Europe.

The focus will be on schemes at a national level, as opposed to the (in some cases many) which exist at a regional and local level. The level of detail across the countries included here varies. This is either reflective of a lack of green finance structures in the country in question, or a lack of available information.

LEGISLATIVE DRIVERS

The Energy Performance of Buildings Directive (EPBD) was adopted in 2002. In the recast which entered into force on September 8th 2010, Article 10 details directives for Financial Incentives and Market Barriers.

It mandates that by June 30th 2011, member states must draw up a list of existing and proposed financial measures and incentives for promoting energy efficiency in buildings. The list should be updated every three years and submitted to the Commission. Subsequently the Commission will recommend and facilitate best practice regarding national schemes. It will also publish, by 2011, an analysis of:

- The effectiveness of structural funds[1] allocations in increasing energy efficiency in building[2];
- The effectiveness of the use of funds from the European Investment Bank (EIB) and other public financial institutions for increasing energy efficiency in buildings;

[1] The Structural Funds are key to the European Commission's European Cohesion Policy. This aims to facilitate cohesion and integration across the continent, and minimise inter-regional differentials. About a third of the total EU budget is allocated to this policy. The stated aims of the structural funds are to promote the development and structural adjustment of regions; to assist regions seriously affected by industrial decline; and to support human resource development.
[2] http://www.cleanvehicle.eu/fileadmin/downloads/Czech_Republic/Financing%2Bsustainable%2Benergy_7.pdf

- The co-ordination of EU and national funding and other forms of support intended to leverage energy efficiency investments;
- The adequacy of funding for achieving EU objectives for energy efficiency.

A BREAKDOWN OF GREEN FINANCE STRUCTURES BY COUNTRY

More information is provided on the websites listed. For a more comprehensive list of sources and useful information, see the Bibliography at the end of the document.

AUSTRIA

Austria Green Building Council (Prospective GBC)

The National Climate and Energy Fund

Public finance
Administered on a national level, the National Climate and Energy Fund (Klima und Energiefonds) provides €100m/year for the thermal retrofitting of buildings, both residential and commercial, until 2014. The money will be allocated via grants of up to 30% of the cost of the works, conditional on the issue of an EPC before and after the retrofit. The scheme has profited both private individuals and SMEs, and has been oversubscribed twice already.
www.klimafonds.gv.at

There are various subsidies administered at a provincial level, especially for thermal insulation, biomass heating, solar energy for heating and domestic hot water preparation, along with energy consulting and the issue of EPCs. The subsidies are in the form of investment grants (usually 10-25%), or loans (at between 1% and 4% interest for 10-20 years, depending on the region and the mechanism in place). There are complex requirements for eligibility, but these usually include the issue of an EPC if the project is a retrofit.

Additionally, energy efficiency requirements are built into the subsidies system for housing in Austria (Wohnbauförderung). This supports low energy and passive buildings. In 2010, there were more than 8,500 passive buildings in Austria, compared to 25,000 in the whole EU.

Feed-in tariffs are administered at a national level, with some additional support at a local level.

BELGIUM

Belgium Green Building Council, (Associate Group)

Tax deductions for investment in renewable energies and energy efficiency (2003 -)
Public finance
This is a federal programme administered by the Federal Public Service of Belgium (FPS) covering new builds and retrofits. Individuals are eligible for tax reductions when undertaking energy efficiency and certain renewable energy projects on their homes. As of January 2005, renters can also apply for the tax reductions. Eligible works: heating installations, thermal retrofits (double glazing, roof/wall/floor insulation, thermostatic valves or regulated thermostats, hot water production, and small-scale renewable energy production (PV, geothermal heat pumps), and energy audits. For the 2008 fiscal year the tax reduction amounted to 40% of the investment, up to a maximum amount of EUR 2,770 per household, whether for new construction or renovation.
http://www.minfin.fgov.be/portail2/fr/themes/dwelling/energysaving/index.htm

Reduced VAT on home refurbishment (2000 -)

Public finance

The programme covers energy efficiency measures in residential buildings older than 5 years. All investment is eligible for the VAT reduction (from 21% to 6%): restoration, transformation, important maintenance, and smaller works like painting.
www.energiesparen.be/node/391

The vast majority of relevant structures are administered at a regional level in Belgium. All of the three regions, Flanders, the Walloon Region, and Brussels-Capital Region, provide subsidies for retrofitting existing domestic buildings, though the specific terms of the grants (what works are eligible etc.) vary from region to region. Additional structures are listed below.

Flanders:

Property Tax Reduction (2008 -)

Public finance

New residential buildings with an E-level[3] of E60 shall receive a 20 % property tax reduction for a period of 10 years. New residential buildings with an E-level of E40 shall receive a 40 % property tax reduction.

Grants for solar thermal, micro-CHP and heat pumps (2006 –)

Public finance

Grants are available to non-commercial institutions and public entities covering up to 20% of the cost for the purchase and installation of solar thermal equipment. Eligible entities include provincial and municipal government bodies as well as public social centres and recognised religious denominations. Equipment must meet certain quality and efficiency criteria and be installed by a registered contractor. Funding for solar thermal grants are provided up to EUR 200 000 per year. Applications are processed and funding disbursed by the Flemish Energy Agency (VEA). The programme was expanded to cover micro-CHP (maximum rated electrical capacity of 50kW) and heat pumps in 2009 (same tariffs available).
www.energiesparen.be/milieuvriendelijke/wetgeving

Walloon Region:

Subsidies to improve energy efficiency in public buildings (2000 -)

Public finance

The Walloon Region's MEBAR programme subsidizes low-income households to improve the energy efficiency of their dwellings. The Region's AGEBA funds go to municipal, provincial and regional buildings, and its ECHOP funds go to schools and hospitals. These latter two programmes were harmonised under a new scheme, called UREBA. The Region also provides a subsidy to municipalities for the replacement cost of inefficient public lighting (EP-URE programme). The subsidy covers some 70% or more, depending on the energy efficiency of the replacement.
energie.wallonie.be

Energy Fund Grants for Small-Scale Heat Generation (2006 -)

Public finance

As of 2006, the regional government awarded grants for the installation of micro-cogeneration systems and high-efficiency wood-burning furnaces and heating boilers. Households, enterprises, self-employed workers and

[3] This is Belgium's energy efficiency calculation for buildings. The lower the E-level, the more energy efficient the building.

private entities were all eligible to receive grants. Every year, the programme is reviewed, taking into account the evolution of technology - budget of €6m - energie.wallonie.be

Brussels-Capital Region

Exemplary Buildings Contest (2007 -)

Public finance

An annual contest for the design and construction or renovation of buildings meeting strong environmental criteria, including energy use. Known as "exemplary buildings", winning applications receive €100/m^2 of built area (€90 for the contracting authority and €10 for the design team), to a maximum of €1m. They also benefit from technical support provided by the region to meet their stringent energy and environmental targets. In 2007 and 2008, 76 projects won the competition, totalling over 200,000m^2 of built area. The buildings consume up to 10 times less energy than conventional ones, and are built with ecological materials. In 2009, €5m is available to distribute amongst winning applicants.
www.bruxellesenvironnement.be/Templates/Particuliers/informer.aspx?id=3332&langtype=2060&detail=tab1

Subsidies to improve energy efficiency in public buildings (2000 -)

Public finance

The Brussels-Capital Region allocates subsidies to municipalities, local public bodies, schools and hospitals for refurbishment projects. Subsidies amount to 20% of the investment costs if they are considered to be of an energy efficient nature. Energy audits are subsidised up to 50% of the cost to a maximum.
energie.wallonie.be

Subsidies for Passive House Construction and Low Energy Renovation (2007 -)

Public finance

Since 2007, the region has provided subsidies for the construction of passive energy houses or buildings, or renovations that result in the building meeting low-energy house standards. A passive house consumes a maximum of 15kWh of heating per m2 per year, while a low-energy house consumes a maximum of 60kWh/m2/year. For a building up to 100m^2, the subsidy is worth up to 100€/m^2, and above that, 50€/m^2. It can be awarded to individuals or collective housing applicants. Applicants are required to conduct an on-site visit, and for passive house construction a blower door leakage test is also required, financed by the region. Non-domestic buildings were eligible to benefit from the subsidies from the second half of 2009 onwards (50€/m^2). The Region has also set up an expert support service targeted at applicants for passive and low-energy house subsidies. The aim of this service is to provide advice and assistance by telephone or e-mail, or face-to-face meetings if desired.
www.bruxellesenvironnement.be/Templates/Particuliers/Informer.aspx?id=3232&langtype=2060

BULGARIA

Bulgarian Green Building Council, (Prospective GBC)

Buildings put into use pre 2005 with category A and category B certificates are exempt from property tax for 3 to 10 years depending on the class and or certificate and whether they use RES for the building's energy consumption.

Financing programmes were run by the Energy Efficiency Agency in 2006, 2007, and 2008 to pay for energy efficiency audits and the implementation of the subsequent recommendations on 1,181 public buildings. The total subsidy was 3.5m € and was financed by the national budget. As a result of the scheme, 490,362 GHz/year in energy was saved, amounting to 222,870 CO_2E/year.

EBRD ran a financing programme for energy efficiency in household from 2005-10. €45M was allocated in the form of soft loans via 6 nominated Bulgarian banks.
www.bgregio.eu

CROATIA

Croatia Green Building Council, Prospective

The Environmental Protection and Energy Efficiency Fund
This fund provides financing for the preservation and sustainable use of the environment as well as energy efficiency and renewable energy programmes. The funds allocated to sustainable building go to public, residential, and industrial properties. Of the 22 projects realised between 2004-2010, and the 56 still underway at the end of that period, works done included installation of lighting and heating systems, and the construction of energy efficient building envelopes. From 2004 to 2010, around 3.2m € was disbursed for these projects.
http://www.fzoeu.hr

HEP ESCO
This is a subsidiary of the state run power monopoly Hrvatska Elektroprivreda (HEP Group). HEP ESCO was set up 10 years ago to finance energy efficiency works in buildings to reduce energy and maintenance costs. Initially the focus was on public buildings, but they are increasingly looking towards the private sector market. The company finances the full cost of the retrofit, then recoups the investment through savings on the energy bills. In this way they guarantee the investment, and assume the risk of savings being achieved. After the investment is repaid the company pulls out completely. This period is expected to be 6-8 years, depending on client and project.
http://www.hepesco.hr/esco/en/aboutus/default.aspx

CYPRUS

There is a grant scheme in existence for the Promotion of Renewable and Energy Conservation which provides some financing for the built environment. The scheme is administered as a percentage of the investment and is financed by the government. It covers thermal insulation for existing buildings, and installation of ground source heat pumps, solar thermal systems, photovoltaic, and small wind turbines for new and existing buildings.

THE CZECH REPUBLIC

Czech Green Building Council, (Associate Group)

The "Green to Savings" Programme (April 2009 – October 2010)/or Green Investment Scheme
This programme is administered on a national level by the Ministry of Environment and subordinated State Environmental Fund. It provides subsidies for heating energy efficiency in residential buildings, existing stock and new builds. Its target areas are: heating energy efficiency (e.g. insulation); new build constructions in the passive energy standard; and renewable for heating (biomass heaters, heat pumps and installation of solar-thermal collectors). The scheme also provides a subsidy bonus for selected combinations of measures.

The programme is financed from the sale of carbon emission credits under the Kyoto Protocol on greenhouse gas emissions to several buyers, including Japan, Spain, Austria or the World Bank under the country's Green Investment Scheme[4], and has a value of up to 25bn CZK (up to 1bn euro over the programme lifetime).
A list of accredited suppliers and subsidised products[5] is provided by the Ministry of the Environment on the Green Savings Programme website. Any product fulfilling certain quality criteria may qualify.

4 http://siteresources.worldbank.org/INTCARBONFINANCE/Resources/Press_Release_Czech_Republic_GIS.pdf

5http://siteresources.worldbank.org/INTCARBONFINANCE/Resources/Press_Release_Czech_Republic_GIS.pdf

Results:
The programme was highly popular and about 80,000 applications came in by October 2010 when the programme was closed for lack of funds. Unfortunately, the administration of the programme was, in some aspects, unclear and programme conditions have slightly changed in the middle of its duration.
http://www.zelenausporam.cz/sekce/582/about-the-green-savings-programme/

Concrete Slab Multi-flat Building Retrofit Supports: PANEL programme (2001 -)
This began as a national programme covering repair and retrofit of apartment buildings constructed out of concrete panels, of which there are more than 1.2 million in the Czech Republic. As of 2009 it covers all multifamily houses. It provides subsidies, contributions to cover interest payments and guarantees related to repairs and reconstruction. There is a specified list of efficiency improvements that applicants must make including insulation, improved heating systems, and use of renewable energy sources which could have a positive effect on the energy efficiency of a building however there are no strict and progressive energy performance criteria set up for the basic level of support. They can also undertake small scale renewable energy projects. Preference is given to buildings in economically depressed areas and those with a poor environment.

A higher proportion of the interest rate is reimbursed if more measures are undertaken, or if the building meets class B energy performance standards. The maximum subsidy available is CZK 5 500/m^2, and paid every 6 months for the duration of the loan.
www.sfrb.cz/programy/?sh_itm=717a863be8c20d233bff3b70288c08d1

Operational Programme Environment (OPE)
Between 2007 and 2013, this programme will offer almost €5bn from the Cohesion Fund and the European Regional Development Fund, with an additional €300m coming from the National Environmental Fund and the state budget. Anyone undertaking an ecological project is free to apply during the announced period for each area of intervention. These areas of intervention are divided into 8 priority areas, of which number 3 covers the sustainable use of energy sources aimed at promoting use of renewable for heat and electricity generation, and the use of waste heat.

Municipalities and towns, public administration and self-government bodies, research and scientific institutes, legal entities, private citizens and non-profit organisations are all eligible for support. Grants can cover up to 90% of a project's total eligible expenses (effectively around 50 to 60% of investment costs). One of the most successful intervention lines was the one supporting energy efficiency renovation of public buildings (like schools, hospitals, city halls etc), about 450 mil. EUR has been spend on about 1500 projects. Assistance is also provided for preparation and application stages of a project.

http://en.opzp.cz/sekce/509/priority-axis-3/

EcoEnergy
A system of grants to incentivise the use of renewables and increased energy efficiency in industrial buildings and processes. Grants range in value from CZK 500,000 to CZK 250 million. They cover 30-60% of investment costs, depending on the type of project undertaken. Eligible projects include the installation or repair of existing

energy production facilities, and modernisation and refurbishments related to energy efficiency in industrial processes.

http://www.czechinvest.org/data/files/eco-energy-call-iii-summary-2125-en.pdf

DENMARK

Denmark Green Building Council – (Associate group)

54m € has been earmarked for a subsidy scheme to replace inefficient coal-fired boilers with more energy efficient heating systems. Qualifying works are heat pumps (geothermal or air-water), solar heating in combination with a new boiler, or a connection to district heating. All types of year-round domestic property are covered. The amount the subsidy is worth depends on the heating system installed.

Feed-in tariffs for renewable energy are available.

ESTONIA

A grant scheme covers 50% of the cost of an energy efficiency audit for apartment buildings (the upper limit of individual grants is 700 €). In 2010, the country established a green investment scheme with a value of €30m funded by Luxembourg. It is targeted at supporting energy efficiency works on apartment buildings. There also exist several green investment schemes worth 135m € targeted on energy efficiency improvements in state-owned buildings. These were launched in autumn of 2010. For private individuals, the interest they pay on loans for energy efficient home renovations can be deducted from their income tax.

FINLAND

Green Building Council Finland, Prospective

Subsidy for energy efficiency renovations

Public finance

Since 2003 the state has been allocating existing apartment buildings (with a minimum of 3 units**)** of up to 15% investment for energy efficiency renovations. Qualifying works include more energy efficient windows, insulation, switching to district heating, wood-based boilers, or ground source heat pumps. Each component has a maximum subsidy in Euros (e.g. 20€/m^2 if you improve the windows and increase the building's energy efficiency rating by one class). In order to be eligible for support, apartment buildings must make a long term energy saving agreement with the government, which requires systematic improvements in energy efficiency and e.g. annual reporting of results. The budget for the programme was €37m during 2010.

Energy Audit Programme (1992 -)

Public finance

For non-residential building stock, grants are provided for energy efficiency audits only.
In the period 1992-2009 the total amount of financial support provided was €26.5m (of a €60.6m spent on audits). The private firm Motiva Oy is responsible for the development, marketing and quality assurance of audit activity and for training the auditors.

At the end of 2009, more than 7,300 buildings used for manufacturing and service production have been covered by auditing activities. Annual savings in service sector and other than process industry were €17m, or 0.5 TWh, at the end of 2008. Cumulative savings over the same period were €430m (nearly 12 TWh), and 75 % of this came from industry. Annual savings of process industry have been 0.6 TWh and cumulative 8.5 TWh (1997-

2008). Approximately two-thirds of the savings potential identified by energy audits will be realised.

The Ministry of Employment and the Economy, established in 2008, continues this work, which was launched by the Ministry of Trade and Industry. Energy audits supported by the Ministry of Employment and the Economy concern the private and public service sectors, industry and the energy industry. In 2006, energy auditing was extended to transport chains. The energy auditing of residential blocks of flats, falling under the responsibility of the Ministry of the Environment, was launched in 2003.
www.tem.fi/index.phtml?l=en&s=2588
www.motiva.fi/en/private_sector/audits

Additional incentives:
A 25% state subsidy covering the material costs of renovation is available to small, low-income households. A tax incentive is in place for the domestic deployment of various service providers. A household may deduct 30% personnel salary costs, or 60% of company provided services (not including taxation) from personal taxation. Although the incentive does not cover energy efficiency improvement alone, households are encouraged to implement such measures within the information concerning the scheme. As of 1st January 2011, grants are available from the state for 20% of costs for installing a ground source heat and air-to-water heat pump as a building's main heating system or a shift to pellet or wood based heating is subsidised by the Finnish government. (Not new houses or those already on a district heating system).

FRANCE

France Green Building Council, (Emerging GBC)

The French Process
In 2007, the French governmental "Grenelle Round Table" brought all the civilian and public service representatives together around the discussion table, thus forming 5 colleges : the State, unions, employers, NGOs and local authorities. By the end of the year, around thirty operational committees will meet to define guidelines and objectives for operational programmes.
The Grenelle Building Plan has been set up to fulfil those commitments and set up the green finance programmes in the building and real estate sectors by gathering the 5 colleges on this specific subject.

A zero per cent eco-loan (ÉCO-PRÊT À TAUX ZERO)
Public finance
This scheme provides preferential loans to cover energy efficiency refurbishment projects. If 2 types of work are undertaken, a 0% loan of 20,000€ over 10 years is available. If 3 types of work are undertaken, this goes up to 30,000€ at 0% interest over 10 years.

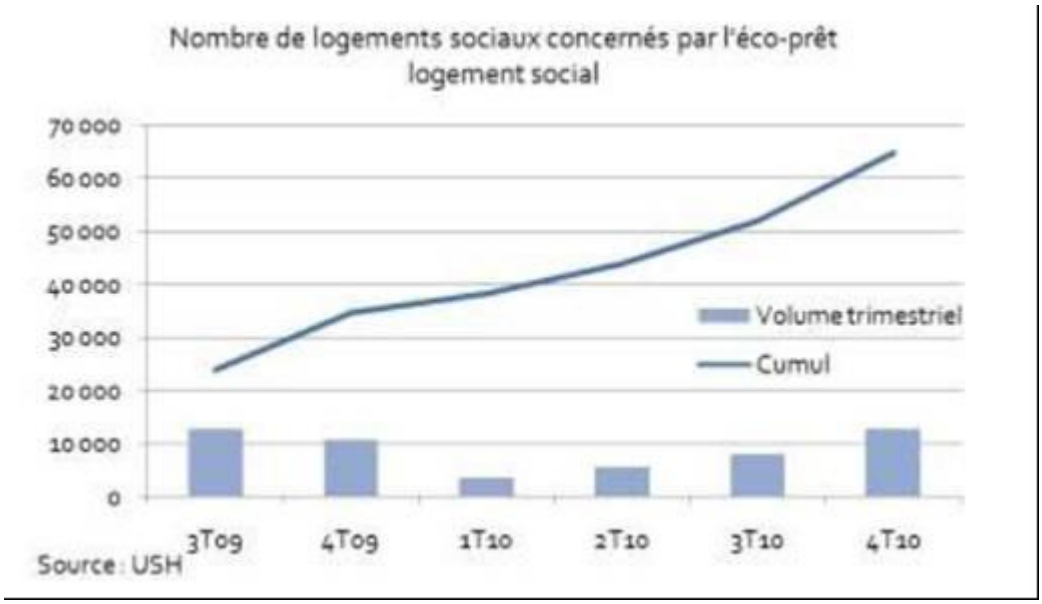
Over 152 000 such preferential loans were granted at the end of 2010, with over 400,000 new loans expected to be allocated by 2013.

The image below shows the number of "0% Eco-Loans" that have been approved since the 2nd trimester of 2009 to the end of 2010.

Green loan for social housing (ÉCO-PRÊT LOGEMENT SOCIAL) (2009-2020)
Public finance

The scheme aims to finance the improvement of energy efficiency in social housing. Plans to renovate the 800,000 social housing units consuming the most energy, and restore an additional 100,000 in 2009 and 2010. 1.2bn € of loans will be available, with a fixed rate of 1.9% for 15 years available to finance restoration of the first 100,000 units which apply. At the end of 2010, 65 000 social housing units have been refurbished with these green loans, and an extra 50 000 units with common loans.

The image below shows the number of social housing dwellings that have benefited from the Green Loan for Social Housing since the 3rd Trimester of 2009 up to the end of 2010. (Source: Plan Bâtiment Grenelle 2010 Activity Report).



Sustainable development tax credit (CIDD - CRÉDIT D'IMPÔT DEVELOPMENT DURABLE) (2005-)

Public finance

This scheme subsidises the installation of equipment which is very energy efficient in both new builds and retrofits. It is targeted at private individuals: a single person can claim up to 8,000 €, a couple up to 16,000.
Results: Between 2005 and 2008, more than 4.200.000 dwellings (primary occupation) have been submitted to renovation works, through the CIDD programme.
Provisional figures for installation of energy efficient materials and equipment in 2005 show a dynamic growth in the domestic sector.

Tax credits for new build residential which meets energy efficiency standards (2009-)

Public finance

The Finance Law 2009 established tax credits for the interest paid on loans used to acquire or construct a new home that meets current building code efficiency requirements. This credit is valid for 7 years if the home meets thermal efficiency standards that exceed those currently in place. The rate remains at 40% throughout the 7 years.

Zero-interest loans for house purchase ("PRÊT À TAUX ZERO ACQUISITION": PTZ+)

The Finance Law 2009 established a zero-interest loan programme for those purchasing a home for the first time (either new build or existing). The loan amount increases by 20,000€ if the building meets low consumption standards (BBC), beyond those required under current building regulations.
BBC refers to "Bâtiment Basse Consommation » which means "Low Energy Consumption Building".

Energy Savings Certificates Scheme (FIRST PERIOD JULY 2006 – JULY 2009); CEE, Law POPE July 2005

A 'White Certificate Scheme' has been in place since 2006. Each energy supplier has an energy saving obligation corresponding to its market share. When an energy saving measure is implemented for an energy consumer (residential/commercial/industry), the supplier receives a white certificate. At the end of the period, if the supplier has not collected enough certificates, they are subject to a financial penalty (0.02 €/kWh). The white certificates may be freely traded.
A list of ratified activities has been compiled by the government.
Results:
Up to March 2009: actions in 58 residential buildings, 80 commercial and 19 industrial.
For the second 3 year period, the energy savings expected are around 345 TWh. The objective was set at 54 TWh for the first period and has been fulfilled and exceed (result of 65 TWh CUMAC). Only 1,4 TW were subjected to transactions.
Considering the actions in the residential sector, we can mention that EDF alone operated more than 350.000 interventions in private residential units, as well as more than 150.000 operations in social housing units. The DHUP (Governmental Department for Housing, Urban Planning and Landscape) has registered more than 1100 energy saving records/cases dealt by the DRIRE (Regional Department of Industry and Innovation).

LDD (« LIVRET DE DEVELOPPEMENT DURABLE ») (Previously called CODEVI (: COMPTE POUR LE DEVELOPPEMENT INDUSTRIEL)) (2007-)
Public finance
€10bn fund for domestic energy conservation projects with low-interest loans. Before it was renamed in 2007, the fund enabled banks to finance the development of SMEs, but now they must use a portion of the funds to provide preferential loans for energy efficiency projects in the residential sector. This portion must equal 2% in 2008, 5% in 2009, and 10% in 2010. Eligible works: energy efficient boilers, thermal insulation, thermal regulation equipment, renewable energies, space heating or water heating equipment using wood or other biomass, heat pumps. Applicants must provide the bank with documentation from the equipment installer, certifying it meets required energy efficiency criteria.

www.industrie.gouv.fr/energie/developp/econo/f1e_eco.htm
www.fbf.fr/Web/internet/content_particuliers.nsf/(WebPageList)/Les+modalites+de+fonctionnement+du+Livret+de+developpement+durable+sont+precisees?Open

Fight against fuel poverty programme (2011 –)
This program aims to help 300 000 home owners refurbishing their homes in order to prevent energy loses. A specific support by local social actors and a verification/checkcheck is provided to precarious owners. A total amount of 500 m€ is devoted to this program.
http://www.anah.fr/les-aides/vous-etes-proprietaire-occupant/laide-du-programme-national-habiter-mieux.html

Government crediting and loan guarantee for energy efficiency and renewable energy investment (2001 -)
Public finance
This scheme aims to promote investment in energy efficiency and renewable. It provides for 7.63m€ from the French Agency for the Environment and Energy Management, and 10.21m€ from SOFARIS, a branch of the development bank for SMEs (BDPME). This total budget (approximately 17.8m€) can guarantee up to 244m€ in

loans to private sector SMEs (as defined by EU criteria) for investments including high performance energy production, use, and storage equipment, as well as energy efficient modifications of production processes and renewables. The guarantee covers medium and long-term risks (2-15 years) and insures the risk taken by the financial institution providing the loan, covering 70% of the loan.

www.ademe.fr/entreprises/Aides/

Additional structures and incentives in place:

The government has reduced tax for energy renovation in existing buildings from 19.6% to 5.5%. Feed in tariffs are in place for renewable energies from 2001.

GERMANY

German Sustainable Building Council (DGNB), (Established GBC)

3 Programmes administered nationally by KfW, the German government-owned development bank[6]:

KfW Programme Energy-Efficient Rehabilitation (formerly The CO_2 Building Refurbishment Programme) (1996 -)
Public/private finance
Preferential loans:
This programme offers loans for residential energy efficient building projects at an interest rate that is reduced using Federal Government Funding. Applications can often be lodged with the applicant's regular local bank, which will then pass their details on to KfW. It is the bank who decides whether to grant the loan, and assumes full liability to KfW for the KfW loan. The support is graduated according to the level of refurbishment achieved. Individual measures are also supported by the scheme, provided that they meet minimum technical requirements. The maximum loan for an efficiency house is 75,000€, and for individual measures 50,000€. Grants are also available (of up to 15,000€) if the KfW Efficiency House standard is achieved (based on energy consumption and heat loss), or for acquisition of KfW Efficiency House.
Results:
Between 1996 and 2004, the programme provided €6bn in loans, enabling the renovation of 57 million m^2 floor area in existing buildings. Due to the high demand, it has not been possible to support individual measures in existing buildings since September 2010. The German Government reported that by the end of 2006 more than 2.5 million housing units had been renovated under the scheme. They estimate a resulting 1.5TWh/year energy savings in 2006, and 703 kt CO_2 annual reduction in CO_2 emissions. Created around 220,000 new jobs.
www.kfw-foerderbank.de/EN_Home/Programmes_for_residential_buildings/Energy-Efficient_Rehabilitation.jsp

KfW Programme Energy Efficient Construction (formerly Ecological Construction (2005 –)
Public/private finance
Preferential loans:
This programme provides finance for construction or first acquisition of KfW efficiency houses. Loans are available to cover up to 100% building costs (maximum 50,000€), conditional on required energy standard being confirmed by an expert.

[6] http://www.kfw.de/kfw/en/Domestic_Promotion/Our_offers/Housing.jsp#Energy-efficientConstruction

5 repayment free years, fixed interest period of up to 10 years, and maturity of up to 30 years.

KfW Programme Housing Modernisation (2005 -)

Public/private finance

Loans for modernisation and rehabilitation of existing residential buildings including improvements in accessibility. Eligible measures include renewal of central heating installations or their components, modification of home floor-plan, remodelling of bathroom.
Reduced interest loan with up to 5 repayment free start-up years and a fixed interest period of up to 10 years. Maturity of up to 30 years. Covers up to 100% financeable costs with a standard maximum of 100,000€/housing unit.

"Local consultations to save energy"

Public finance

Under this programme, the Federal Office of Economics and Export Control (BAFA) gives grants for home owners to consult qualified engineers. It is administered on a federal level and covers new builds and retrofits. Applicants can be individuals, municipal authorities, SMEs or not-for-profit organisations. There has been a notable reduction of heat consumption and CO_2 emissions in buildings as a result of these local consultations. BAFA also provides a grant to people installing modern technology for using renewable energy PV, solar and biomass units, or heat pumps.
http://www.bafa.de/bafa/en/index.html

Private finance

In Germany also the BayernLB Group, together with the DKB (Deutsche Kreditbank AG) has been closely involved in renewable energy financing since 1996 and also in financing certified buildings, providing loans with reduced interest rates. For more information and examples of financed projects see links below:

CERTIFICATION of BUILDINGS

http://www.nachhaltigkeitsbericht.bayernlb.de/cgi-bin/show.ssp?companyName=bayernlb&language=English&report_id=nb-2009&id=6520

http://www.b4boberbayern.de/nachrichten/stadt-muenchen_artikel,-Pariser-Hoefe-in-Stuttgart-erhalten-als-DGNB-Pilotprojekt-Vorzertifikat-in-Silber-_arid,54481.html (only in German)

http://www.bayernlb.de/internet/de/presse/presseinfo/2011/April/20110411Cubes.html (only in German)

http://www.investment-on.com/index.php?option=com_content&view=article&id=2498:bayernlb-finanziert-pariser-hoefe-in-stuttgart-mit--70-mio&catid=34:people-chat-a-news (only in German)

http://frankfurtbueroflaechen.wordpress.com/2011/01/18/bayernlb-finanziert-frankfurter-skyline-hochhaus-t11/ (only in German)

RENEWABLE ENERGY

http://www.bayernlb.de/internet/en/kunden/corporates/Renewable_energies/Renewable_energies.html

http://www.bayernlb.de/internet/en/kunden/corporates/Renewable_energies/Competencies/Competencies.html

http://www.bayernlb.de/internet/en/kunden/corporates/finanzpl/strukfin/project/project.html

http://www.presseportal.de/pm/72149/1402476/bayerische_landesbank

http://www.save-more-energy.com/update/renewableenergy/BayernLB_largest_solar_power_plant.htm

http://www.greeneconomyturkey.com/finance-from-bayernln-to-wind-farm-in-turkey.html

Flyer:
http://www.bayernlb.de/internet/ln/ar/sc/Internet/en/Downloads/0200_Corporates_Markets/FlyerRenewableEnergy.pdf

All German initiatives (BAFA, KfW and BayernLB) can be granted to both private and public applicants.

GREECE

Greece Green Building Council, (Proposed GBC)

Operational Programme for Energy (OPE): Fiscal Incentives for Renewables and Energy Conservation (1994 -)
The Operational Programme for Energy (OPE) provides capital cost grants for the promotion of renewable energy and energy conservation. Up to 1999, 125 renewable energy projects were approved (130 MW wind, 72 MW small-hydro, 46 MWh biomass district heating, 42 MW CHP with biomass, 5 MWh other biomass projects, 42 solar central active systems, 8 projects for PV systems and 5 projects for passive solar systems). In addition, approximately 300 projects for energy conservation and substitution of fossil fuels and electricity by natural gas in the industrial and tertiary sectors were approved. In completing OPE, the Greek government expected to conserve 4.3% and 2.2% in the industrial and tertiary sectors, respectively.
www.ypan.gr

HUNGARY

Hungary Green Building Council, (Emerging GBC)

Green Investment System (GIS) (2009-)
Public finance
This is a national scheme administered by The Energy Centre. It provides grants and preferential loans to encourage energy efficiency measures in the existing residential stock. The scheme covers two sub-programmes: the Climate-friendly Home Panel sub-programme and the Energy Efficiency sub-programme. There is also a Climate-friendly home programme for existing homes that are not constructed using panel technology. Activities eligible for grants include insulation, new doors and windows, and engineering solutions affecting the building envelope. Also eligible for support is the modernisation of equipment and installation of renewable energy sources. The building must be shown to be more energy efficient and have lower CO_2 emissions once the project is completed, and the level of the subsidy is dependent on the improvement achieved. The scheme is financed from the sale of carbon emission credits to countries with higher emissions.
www.energycentre.hu

National Energy Conservation Programme (2008-)
Public finance
Provides grants of public finance for energy efficiency works in the existing residential stock. The scheme is administered by the Energy Centre Hungary, with a budget of HUF 1.6bn.

In 2008, five different types of energy efficiency improvements were subsidised as part of the programme. The percentage of the investment subsidised varies according to the type of improvement carried out. Eligible works: change or insulation of windows and doors, improvement of heating and hot water supply (e.g., change of boiler), thermal insulation of existing buildings, complex energy efficiency improvement of buildings, renewable energy installations(biomass, geothermal energy, wind, waste, solar collectors and Photovoltaic) for generating heat and/or electricity.
www.lendulet.hu/print/hirek/energiatak_paly.html

Environment and Energy Operation Programme (2007-2012)
Public finance
Grants: National funding 15%, European Funding 85%
The programme aims to increase energy efficiency and the ratio of renewable energy sources. Grants are available for certain renewable energy technologies including biomass, biogas, geothermal electric, the most modern heat pump systems for heating and cooling purposes, PV, wind and water power. There will also be funding for improving the energy efficiency of public buildings, modernizing district heat supply and reducing network heat losses, and improving energy efficiency in the commercial sector.30-100% of investment available for public and commercial building. Interest has not been high due to complex application process (120 pages) and low chance of success (30%). Energy calculations required, but achieved energy level doesn't affect the quantity of the grant. Preparation costs are eligible for subsidy. In second half of 2010, 837 project requests were submitted with a grant value of 81bn HUF.
www.energiakozpont.hu
www.nfu.hu/?lang=en

National Energy Saving Programme (2006 –)
Public finance
Offers financial assistance for energy efficiency in 9 categories:
- residential energy conservation
- energy conservation of entrepreneurs,
- reduction of energy costs and energy consumption in municipalities and budgetary institutions,
- modernisation of public lighting and change of energy fuel in natural gas DH (district heating) systems,
- modernisation of DH systems,
- use of renewable energy sources in municipalities and private persons,
- use of renewable energy sources in enterprises,
- energy saving in SMEs, and
- third party financing for energy conservation investments.

In 2006, the NEP programmes commanded a budget of 1063 million HUF: 880 million HUF for energy efficiency and 183 million HUF for renewable energy projects. Only private citizens benefitted from the efficiency subsidies, at a maximum of 30% subsidy of their investments.

Structural Funds for Environmental Protection and Infrastructure Operative Programme (EIOP) Subsidies (2006 -)
Public finance
The Environment Protection and Infrastructure Operative Programme of Hungary's National Development Plan specifies measures to promote energy efficiency and renewable energy sources. In 2006, the EPIO provided 280 million HUF in subsidies to three types of energy efficiency project: the modernisation of buildings and institutions, the development of district heating systems, and the promotion of cogeneration.

ESCOs to fund energy efficiency improvements in public schools (2006 -)
Public/private

The Hungarian government announced a partnership with Energy Service Companies (ESCOs) to improve the energy efficiency of buildings used for public education. As announced, the ESCOs will upgrade the buildings' heating and lighting and insulation. Cash conserved from spending on energy bills will fund the installation and upkeep of further efficiency measures in public schools and profit the ESCOs.
www.energycentre.hu

The Energy Saving Credit Fund (1991-)
This is a revolving credit fund that supplies special interest rates to energy efficiency investments, and the utilisation of renewable energy resources. The fund totalled 2.39bn at the end of 2006. The Energy Efficient Credit Construction fund is co-financed by PHARE[7] and exceeded 7.5m€ in 2007. "For a Successful Hungary" has a scheme aimed at the residential sector which provides soft loans and grants to energy efficiency projects and installation of renewables.

IRELAND

Irish Green Building Council, (Associate Group)

Home Energy Saving Scheme (2009 -)
Public finance
Sustainable Energy Ireland (SEI) administers the Home Energy Saving Scheme. It is a grant scheme which seeks to encourage energy efficient retrofit investments by home owners. Fixed grants are available up to 40% of the cost. Eligible measures are insulation (cavity wall, attic, external wall, internal wall), heating controls, highly efficient boilers (over 90% efficiency), and energy assessments. The scheme is soon to be superseded by the National Retrofit Programme, which will be launched later in 2011. Hence the scheme was suspended for applications on 09/05/11.
www.seai.ie/hes

Energy Efficiency Tax Incentives for Business (2008 -)
Public finance
This is a tax incentive scheme enabling companies to write off 100% of the cost of designated energy efficient equipment against corporation tax in the year of purchase. Companies claim the tax relief in their corporation tax returns. The scheme covers 29 classes of technology. Suppliers of products meeting published energy efficiency criteria can apply to Sustainable Energy Ireland (SEI) to have their products listed in regulations and on the SEI ACA scheme database as eligible for this tax relief.
www.seai.ie/aca

Renewable Energy and Energy Efficiency Partnership (REEEP) (2002 -)
The Renewable Energy and Energy Efficiency Partnership (REEEP) was conceived at the World Summit on Sustainable Development in August 2002. It is a global not-for-profit public-private partnership which aims to catalyse the market for renewable energy and energy efficiency. REEEP promotes innovative finance and business models to activate the private sector in these areas. Its regional secretariats provide access to best practice in policy and finance to promote renewable energy and energy efficiency. Its International Secretariat engages political, financial and business support to reduce the risk inherent in implementing new policy and financing initiatives.

The partnership also promotes investment opportunities, supports business and institutional models, bundles small projects to a bankable size, links to carbon finance and replicates successful financing mechanisms. REEEP

[7] The EU PHARE Revolving Fund (PRF) is a soft-loan credit facility to support the energy efficiency investments by small and medium-sized enterprises in the private sector and municipally-owned companies and institutions.

conducts regular programme funding cycles, focusing on projects which can be replicated and scaled-up, and have an impact on the development of the market for renewable and efficient energy and innovation. The partnership has over a hundred projects in its portfolio, designed to help remove market barriers to clean energy in more than forty countries, primarily in the developing world.
www.reeep.org

New House Grants (2001 -)
Public finance
A provision in The Housing Bill 2001 which provides for more flexibility in the payment of new house grants in the future, including differential rates to encourage more efficient use of energy, and the use of renewable forms of energy.

Warmer Homes Scheme (Low Income Housing Programme) (2001 -)
Public finance
Sustainable Energy Ireland's (SEI) Low Income Housing Programme was set up in 2002 to help establish and implement a national plan of action to systematically address the problem of fuel poverty in low income homes nation-wide. Core delivery of the programme is through the Warmer Homes Scheme. This scheme aims to improve the energy efficiency and comfort conditions of homes occupied by low income households, and to establish the systems and increase Ireland's capacity to install such measures. The scheme aims to engage regional community-based organisations to acquire and apply the skills to carry out the work, which includes attic insulation, draught proofing, lagging jackets, energy efficient lighting, cavity wall insulation and energy advice. Eligible homes are identified locally via networks drawn from the statutory and voluntary sector. The focus is on the energy efficient retrofits of privately owned and rented homes.
www.sei.ie

ITALY

Green Building Council Italia, (Emerging GBC)

Financial structures in place for incentivising energy efficiency in buildings are largely administered on a regional level in Italy, however, below some of the national ones are described.

Please note that among Regional schemes there are some significant examples, such as the opportunity in some regions to have significant extra volume if the construction complies with high sustainability standards, evaluated through specific rating systems.

Tax Credit Programme (extended until December 2011)
Public finance
A 55% tax credit is distributed (over 10 fiscal years) for the following building energy efficiency measures: electric, absorption cycle, and geothermal heat pumps, condensing boilers and solar thermal collectors; retrofitting of the building envelope that secures an energy performance less than 20% of the requirements in force. Measures must be applied to those existing buildings which are equipped with a heating system (apart from the installation of solar thermal).

The programme is considered a success in terms of saved energy and induced investment. In the years 2007-10 inclusive, the credit supported 840,000 interventions including 2m flats (7.7% of existing flats). The overall estimated energy saving is 6500 GWh/year, with an average over the four years of 42,000 jobs created.

Tax Credit Programme (extended until December 2012)

Public finance

A 36% tax credit is distributed (over 10 fiscal years) for the maintenance and reconstruction of existing residential buildings. The measure is applicable also to energy efficiency measures (obviously for those not included in the 55% described above) such as installation of heat counters or mechanical ventilation systems and to the elimination of architectonical barriers.

'White Certificates' Programme

Public finance

A market mechanism for energy efficiency called 'White Certificates System' or 'Tradeable Energy Efficiency Certificates, TEEs' has been present in Italy since 2004.
The system is based on the obligation for distributors of electricity and gas to reach certain levels of end-use energy savings every year through energy efficiency projects. They can choose between standard measures, simplified by pre-calculated forms, or more complex measures which require monitoring. Alternatively, they can buy savings from ESCOs or other authorised operators which can generate savings and obtain the TEEs; trading is allowed both on an organised market and via bilateral contracts.

Some of the measures are dedicated to systems which are applicable in buildings, such as condensing boilers, CHP plants, solar thermal or heat pumps. For the moment, the incentive has seen good results for industrial measures, but has proven less interesting for measures applied to the built environment. Therefore the implementing authority is now studying some extensions to the mechanism which should guarantee a better pay back and increase of the usage of this market-based mechanism. If empowered by corrective measures, the scheme could be very effective as it incentivises the role of ESCOs.

www.autorita.energia.it

Photovoltaic Feed-in Tariffs
Current period:1st June 2011 – 31st Dec 2012; following period: 1st January 2013 – 31st Dec 2016.

Public finance

With a target of 23 GW peak PV installed at 2016, the Fourth 'Conto Energia' recently replaced the third 'Conto Energia'. Although premium tariffs are lower than previous ones, the mechanism is extended until the end of 2016, assuming grid parity at 2017.

Incentives are split between 'large' and 'small' (< 1MWp if on buildings, 200 kWp also in the ground but with local energy usage). For 2011 incentives decrease every month, from June till December; for 2012 incentives decrease every six months. Large plants are subject to a budget limit and need to book on a registry, whereas small plants are not subject to any limit.

A premium of 5 c€/kWh if asbestos is removed from roofs while installing PV.
10% premium if products installed are produced inside the EU.
From 2013 the incentive will be given as a 'all-inclusive' tariff, and a premium will be given for self consumption, as of the German model.
www.gse.it

Special Fund to Support the Implementation of Energy Efficiency Targets (2010 -)

Public finance
Under this scheme grants are available for the purchase of new buildings rated Class A and Class B, according to Italian Energy Certification Schemes (€60m): For Class A buildings, €116/m^2 of usable area up to a maximum of €7,000; for Class B buildings, €83/m^2 up to a maximum of €5,000.
www.sviluppoeconomico.gov.it
www.enea.it/com/ingl/default.htm

Incentives for low energy buildings
Public finance
The government provides public grant for new build residential. This amounts to 83€/m^2 if energy performance is at least 30% less than the minimum requirement in force (maximum of 5,000€ per intervention), and 116€/m^2 if at least 50% less than minimum (maximum of 7,000€ per intervention).

Kyoto Fund
Public finance
The Ministry of Environment has budgeted a revolving fund for sustainable energy investment to be managed by the regions.

THE NETHERLANDS

Dutch Green Building Council, (Established GBC)

By the end of 2010, a number of subsidies were available to Dutch consumers. These include a grant of 200€ for detailed energy performance advice which often includes an EPC, a subsidy of 350€ or 750€ when improving a home by 2 or 3 energy classes respectively, VAT reductions for thermal insulation, and higher mortgages when buying a 'green certificate' or 'A class' dwelling. The Dutch Ministry of Finance has maintained a programme of greening the tax system by imposing an increasing levy on energy consumers since 1999.

More with Less (2008-20)
Public/private
The government is working with key players in the housing, energy, and construction sectors to reduce energy consumption in the existing residential stock by 2020. To overcome financial barriers, the programme aims to secure fixed monthly expenses: energy efficiency investment is offset by the monthly reductions on energy bills. Each project is overseen by a contact person. This can be a contractor, an energy counsellor, an installer, or an architect. They arrange for subsidies, energy labels, offers, and finance. Savings potential is identified and progress monitored through EPCs. Interventions are carried out in line with the regular renovation cycle i.e. in the case of removal or renovation, when people are more inclined to invest. The initial target of improving energy efficiency of 10,000 buildings has been met.
international.vrom.nl/pagina.html?id=37473

Energy-saving subsidy scheme for low-income households (2006-)
Public finance
3.1m € has been allotted to projects helping low income households to save energy. The money goes to consultants and contractors to advise low-income households on energy saving measures, and oversee works. Those who received grants in 2006 were given two years to complete their projects. Eligible works include those

on heating systems and introducing simple energy-saving measures such as weather strips, low-energy light bulbs, and water-saving shower heads.

Energy Investment Allowance (2004-)

Public finance

Entrepreneurs who invest in relatively innovative energy-efficient technologies or renewable energy projects can deduct a certain portion of the investment cost from their corporate income tax. There were no targets in place at the launch of the programme. As of 1st January 2004, the allowance has been set at 44% of the annual investment costs for such equipment (purchase and production costs). This is deductible from the company's taxable annual profit in the calendar year in which the equipment was procured, subject to a maximum of €115m. A list is provided of equipment which qualifies for the programme. The budget for the programme was £137m in 2005. In 2004 it was estimated that the scheme saved 40Pj (1200 $ktCO_2$).

NORWAY

Norwegian Green Building Council, (Associate Group)

The Energy Fund (ENOVA SF)

Public finance

This fund provides a range of financial incentives to encourage building developers to go beyond the minimum energy efficiency requirements, and for owners to develop good practice in this area. Its funding comes from a mandatory levy of 1 øre/kWh (0.008€/kWh) on the energy distribution tariffs for consumers, the yield from the Norwegian Fund for Renewable Energy and Energy Efficiency, and public money from the state budget. ENOVA provides grants to incentivise the uptake of renewable energies. Its current target is to contract 18 TWh/year in new renewable energy production or energy savings by the end of 2011 compared to 2001. Enova is tasked to find practical solutions and manage the funds in a way that ensures that the targets are achieved in the most cost-efficient way possible. Hence, projects that generate a high energy result per amount of support are given priority.

www.enova.no

Incentives for Low Energy Housing (2002-)

Public finance

The Norwegian State Housing Bank (NSHB) offers preferential loans to low energy and passive residential new builds and retrofits. Loans of up to 90% of the investment are offered. The bank has also entered into collaborative agreement to market houses which host the Swan Nordic Ecolabel (those which qualify for the bank's loans).

www.husbanken.no

www.regjeringen.no/upload/KRD/Vedlegg/BOBY/rapporter/building_for_the_future_h_2237e%20.pdf

POLAND

Polish Green Building Council, (Established GBC)

Green Investment Scheme

As of April 29, 2008 Poland became eligible to engage in international trading of carbon emissions credits under the Kyoto protocol. Funded by the proceeds from this, the Green Investment Scheme provides grants to incentivise energy efficiency measures across a number of sectors. Eligible measures include use of renewables. It is administered at a national level by The National Fund for Environmental Protection and Water Management. Recipients of grants must monitor and report on GHG reductions achieved, other environmental

effects, as well as on how resources have been spent and progress with implementing the programme or project.
www.nfosigw.gov.pl/en/priority-programmes/green-investment-scheme/

Overhaul and Thermo-Modernisation Fund (1999 -)
Financial support for refurbishment projects which meet minimum energy reduction requirements.

An energy audit is required with the loan application to the lending bank, and subsequent verification that the design is performing in line with the audit. The application is then passed to the state owned 'National Economy Bank' (BGK). If the requirements are met, a premium is paid from the fund directly to the lending bank after the modernisation work has been completed.
Support from the fund has been available for public buildings since 2001.

Infrastructure and Environment Operational Programme (IEOP) (2007-13)
Public finance (EU)
The European Commission funded IEOP has 15 priorities. Number 9: is 'Environment-friendly energy infrastructure and energy efficiency. Out of a total budget of 37.56bn€, priority 9 has 1.5bn €. The programme provides subsidies for retrofits in the public and not-for-profit sector. It covers the administrative costs of applications for financing as well as the works themselves.

A grant of 40% of investment for solar collectors for hot water preparation in existing buildings was introduced in 2010. However, the subsidy comes with a financial burden of income tax and credit cost as well as a complicated filing procedure.

There is currently no evident support for low-energy housing in Poland. In 2008 as a part of implementation of 2002/91/UE (so called EPBD1) Poland has lowered its energy efficiency requirements in relation to the buildings (which is precedent for the present-day European market).

The Bank of Environmental Protection (Bank Ochrony Środowiska) has a 1% lower mortgage rate for passive houses. At this time there is no additional third party certification (required for the Bank purpose) - specifying what the passivehouse is.

PORTUGAL

Portugal's National Plan for Energy Efficiency (PNAEE), granted non-refundable support of 50% towards investment in solar thermal energy for hot water preparation in the residential sector (2009), and in institutions (2010). Consumers can purchase these systems directly in banks that ensure that the installation is performed with certified solar equipment and by professional installers.

The government offers individual income tax reductions related to house loans for A/A+ level homes. They also provide a tax deduction of 30% for investment in renewable energies and insulating materials. The maximum per building is 803€.

ROMANIA

Romania Green Building Council, (Established GBC)

National Thermal Rehabilitation Programme (formerly the Programme for the thermal rehabilitation of multi-level residential buildings (2002-2009))

This is a national initiative administered by the Ministry of Regional Development and Tourism in cooperation with local administrations. It provides grants for the thermal rehabilitation of residential blocks of flats built between1950-1990. Eligible works include insulation on exterior walls and roofs, replacement of windows and doors, thermal losses of pipes and furniture in basements. After the rehabilitation works the energy consumption in the building has to be below 100Kwh/m^2/year. The aim is that within 6-8 years, the investment will have paid for itself in savings on energy bills. Mayors of the various municipalities, cities and localities coordinate the project from the local level. They are also responsible for putting in place the necessary measures for developing the energy expertise to carry out the audit and the rest of the rehabilitation programme. There is no list of accredited products or installers; the law of public acquisition applies. 80% of the funding comes from the state budget and the rest should be covered by the final beneficiary (owners' association). The 80% financing is covered from the national budget (50%) and local budget (30%). If the local authority has the budget in place, it can cover up to 50%, meaning that the works are fully subsidised by the state. The programme covers not only the thermal rehabilitation works, but the necessary funds for the energy expertise and audit, feasibility study, and design.

Green House Program (2010 -)

This is a public initiative coordinated by Ministry of Environment and Forestry that offers grants for public institutions and private individuals for improving or replacing their heating systems with renewable energy solutions in existing buildings. The Environment Fund Administration raises the money from the fines applied to private and public institutions that do not comply with Romanian environment regulations.

The following amounts are available to private individuals: 6,000 RON (approximately €1,430) for solar panels; 8000 RON (approximately €1,900 EUR) for heat pumps; 6,000 RON (approximately €1,430 EUR) for heating solutions that are based on wood pellets and waste. The grant covers the price of the equipment, the installation works and VAT. The budget allocated in 2010 was 110 000000 RON (approximately 26 Mil EUR) and was allocated regionally to different counties.

The maximum funding available for public institutions may vary based on the type of institution and number of inhabitants they represent (in case of local public authorities). It ranges between 4,000,000 RON (approximately €950,000) and 500,000 RON (approximately €120,000). 90% of the investment is the maximum that can be covered by a grant. The funding applications are evaluated based on co-financing capacity of the beneficiary, type of system replaced, cost-benefit analysis of the project and lastly the efficiency /rate of performance improvement. The budget allocated for 2010 was 100,000 000 RON (approximately €24million).

Loans guaranteed by the state for thermal rehabilitation of blocks with subsidised interest rate (Summer 2010 -)

This is a public initiative of the Ministry of Regional Development and Tourism to complement the existing grant program for thermal rehabilitation of blocks (above). It offers alternative funding opportunities for building owners interested to refurbish their buildings. Loans are available for existing domestic buildings only – both individual houses and blocks of flats – to cover thermal rehabilitation of building envelope, replacement of heating installation, integrating renewable energy solutions for thermal energy and electricity. Funding is dependent on the completion of an energy audit. The bank offers credit for 90% of the investment cost. The loan is 5 years long and government-guaranteed, with an interest rate subsidised by the state. The maximum loan available is 1,850€/room (in case of apartments); 7,400€/individual house.
Initially the public interest was not high. This is mostly because the loan period (5 years) is too short to make the program very attractive for the end user – the monthly costs with paying the loan rate and the energy bills for a rehabilitated building are higher than they would be for a non-rehabilitated one
More info: www.mdrt.ro

EU EBRD – Energy Efficiency Finance Facility

Public initiative from the EU level (EBRD) customised for the Romanian market and implemented with local banks. The funding mechanism is made up of a €80m credit line extended through participating banks (currently 6), combined with €20m in grants from the EBRD for energy efficiency projects in Romania. The scheme is targeted at the private sector, and building rehabilitation is just one of the types of investment it covers. The three types are equipment and technology (for agricultural and industrial sector companies only); more energy efficient buildings; and cogeneration of heat and power. The maximum loan available for a project is €2.5m, with a 15% grant component of the total loan value (which cannot exceed €375,000). The program also includes free consultancy in energy efficiency for the projects that apply for the loans. To qualify for the loan, the works must deliver a minimum of 30% energy savings for building related investments (insulation of walls, windows, doors, roofs, building energy management systems, hot solar water, energy efficient lighting), and at least 10% IRR.
www.eeff.ro

Regional Operational Program (Structural Funds)
The Regional Operational Program is a public initiative providing grants funded from the European Regional Development Fund. It is managed by Ministry of Regional Development and Tourism in coordination with regional development agencies, and one of its 6 priority areas is 'Support for developing sustainable development strategies/integrated urban plans for cities'**.** Public authorities apply for funding for new build and retrofit projects for buildings that are in their administration. Examples of eligible green building projects: rehabilitation of old industrial sites, development or modernisation of local structures to support local business, rehabilitation of buildings associated with delivery of social services for the community (e.g. cultural centres, schools, healthcare centres, social housing). The funding available for each type of project varies greatly. A rough estimate would be between €8,300 and €22m.
The total funding allocated for Regional Operational Program Axis 1 is 1391,171 Mil. EUR (for the 2007-2013 period) and until now (March 2011) approximately 25% of the amount was contracted in different projects.
www.mdrt.ro

RUSSIA

Russia Green Building Council, (Prospective GBC)

Russia Residential Energy Efficiency Programme (IFC)
IFC, a member of the World Bank Group, launched its Russia Residential Energy Efficiency Project in 2010. The Project is being implemented over three years with financial support from the Ministry for Foreign Affairs of Finland and the Ministry of Employment and the Economy of Finland. It aims to stimulate investment in the energy efficient renovation of multifamily buildings.
The project will work to develop an appropriate legal and regulatory framework, overcome barriers to financing and develop financial products to stimulate the market in energy efficient renovations. It will go through Russian banks to finance the energy efficient modernization of multifamily buildings. Eligible projects for the banks will include loans to home owner associations or housing management companies to finance the following energy saving measures, depending on the needs of the building:
Modernising heating systems (to include insulation, thermostatic valves, replacement of heating pipelines and equipment, window and door replacement), electrical systems (including installation of electricity metres, low energy consumption lighting/fixtures), hot and cold water systems.
http://www.ifc.org/ifcext/eca.nsf/Content/PublicationRussiaResidentialEnergyEfficiencyprojectbrochure2010/$FILE/PublicationRussiaResidentialEnergyEfficiencyProject2010.pdf

SLOVAK REPUBLIC

No subsidies or incentives available as of November 2010.

SLOVENIA

Slovenia Green Building Council, (Prospective GBC)

Cohesion fund financing is in place in Slovenia. It offers grants for district heating systems operating on wood biomass as well as large wood biomass boilers in industry.
Subsidies for the energy restoration of existing buildings and the construction of low energy new buildings are in preparation. These will target public buildings, school buildings, buildings for research and homes for elderly people.

SPAIN

Green Building Council Espana, (Established GBC)

Support for Energy Efficiency in Buildings
This scheme is part of the Plan de Ahorro y Eficiencia Energética (National Energy Savings and Efficiency Plan, PAEE, 2008-2012). The Plan is managed by the IDAE (Instituto para la Diversificación y el Ahorro Energético, Institute for Energy Diversification and Savings); policies are developed at a regional level by the Autonomies' (the seventeen administrative Communities into which Spain is divided) governments, and cover existing residential and public buildings.

Grants and preferential loans are issued from a budget of €804m allocated to energy efficiency in buildings for the full period. Subsidies are available for the following works: thermal rehabilitation of existing buildings, improvement of energy efficiency in thermal installations of existing buildings; improvement of energy efficiency in light installations in existing buildings. For planned cuts in energy consumption of 20%, 22% of the necessary investment in subsidised. This can be up to 27% if the building aims to achieve an energy efficiency rating of B, and 35% for A.

New builds rated A and B are also subsidised under PAEE as the optional scheme entitled:
'Construction of New Buildings with High Energy Ratings' (not taken up by all provincial governments in Spain). The level of subsidy available varies according to the type of building and the achieved rating. For example, a property rated A and housing a single family would receive 50€/m^2.
www.mityc.es/en-US/Servicios/GabinetePrensa/NotasPrensa/comparecencia290708.htm

BIOMCASA, GEOTCASA, SOLCASA
These are fund lines managed by the IDAE to integrate the thermal renewable energies (biomass, geothermal and solar) into buildings and executed by ESCOs certified by the IDAE. The IDAE provides low-interest finance to the ESCOs that undertake works within the scope of the programme.

Renove Tourism Plan (2009-)
In partnership with Spain's Official Credit Institute (ICO), the Plan offers low-interest loans from a fund of €1bn for tourism sector companies to undertake renovation and improvement, including measures that improve energy savings or the implementation of environmental quality management systems. Up to 90% of investment costs are financed, up to a maximum of €1m, and with a fixed interest rate of 1.5%. In February 2009, the initial EUR 400 million earmarked for the plan was exhausted, and an additional EUR 600 million allocated.
www.mityc.es/turismo/es-ES/Sostenibilidad/destinosmaduros/planrenoveturismo/Paginas/planrenoveturismo.aspx

Financing for Renewable and Energy Efficiency

In 2002 - under the Renewable Energy Plan 2000-2010 - a €30m financing line was been provided by the Official Credit Institute (ICO) and the Institute for Diversification and Energy Saving (IDAE) for renewable energies and efficiency projects (saving and fuel switching in industry, energy efficiency in buildings, etc.). The maximum that could be financed in a project would be 70% of the investment by means of loans at low interest rates.
www.idae.es

Grants for energy efficiency in buildings (2008-2012)
In December 2007, the Spanish government announced that it would provide €1bn worth of subsidies for the refurbishment of existing residential buildings between 2008 and 2012, together with €2bn in credit for energy efficiency improvements of homes. Additionally, the government said it would provide €200m for energy efficiency improvements to schools and public buildings in large towns and cities.
www.idae.es/index.php/mod.pags/mem.detalle/idpag.17/relcategoria.1022/relmenu.42

Energy audits for the private sector (2007 -)
The Spanish Ministry of Industry, Tourism and Trade with IDAE's support co-ordinates audits and energy efficiency actions developed with Autonomous Communities and private sector firms. This collaboration includes public subsidies to finance energy audits in beneficiary sites. 260 are estimated to be carried out for the period 2008-2012.
www.idae.es/index.php/mod.pags/mem.detalle/idpag.17/relcategoria.1022/relmenu.42

Other structures in place:

The state-subsidised construction of dwellings is further subsidised if the building is rated A to C (3,500€ to 2,000€). By Royal Decree, amongst measures to boost economic recovery and employment, an income tax deduction is available for improvement works on residential housing, and a VAT reduction for renewal and repair works on the main residence.

There are also potential reductions of municipal taxes that can go up to up to 90% on the Planning and Building Permits, and on the ICIO (Impuesto de Construcciones, Inmuebles y Obras, the construction tax). These are very rarely applied as they depend on a municipal decision, and these taxes are one of their main income sources. The present economic situation does not make the situation better.

In March 2011 the project of Law of Sustainable Economy was approved. It foresees financial measures to enhance the energy refurbishments of buildings by private-public actors. This will be developed at the Future Law on Quality and Sustainability of the Urban Environment, which is expected to be issued by the third quarter of year 2011. www.economiasostenible.gob

SWEDEN

Sweden Green Building Council, (Emerging GBC)

Energy Audits for the private sector (April 2010 -)
This scheme is targeted at relatively energy-intensive companies (usage of at least 500 MWh per year) and is administered by the Swedish Energy Agency. The support covers 50 % of the costs for the energy audit, up to maximum of 30,000 SEK. Applications are to be sent to the Swedish Energy Agency before the energy audit takes place and the support is paid to the company following completion of the energy audit and when suggestions for measures to be taken are in place. The measures will then be followed up a few years after the energy audit.
www.energimyndigheten.se/Foretag/Energieffektivisering-i-foretag/Ekonomiskt-stod-for-energikartlaggning

Government subsidies for local energy efficiency measures (2010 – 2014)
Public funds of SEK 99m/year (2010-2014) are being provided through the Swedish Energy Agency to

Municipalities and county councils actively undertaking energy efficiency measures. Under this heading comes the rental/ownership of energy efficient buildings, and retrofits of existing ones. Applications are being accepted as of 1 January 2010. Beneficiaries committed to determine a strategy for energy efficiency and to actively work to implement it. Annual reports must be submitted annually to the Swedish Energy Agency who offer advice and support on energy efficiency. The support scheme will also facilitate improved collaboration between the 21 county administrative boards and municipalities.
www.energimyndigheten.se/sv/Om-oss/Var-verksamhet/Effektiv-energianvandning/Energieffektiviseringsstod/

LAGAN
This is a collaborative project between the Swedish Construction Federation, the Swedish Energy Agency, Region Västra Götaland and others. It is a subsidy programme for low energy use which aims to finance demonstration projects and regional initiatives, and thereby to encourage the building and development of low energy buildings. In this way it hopes to foster a national market for this sort of construction. The 5 year programme (2010-2014) has a budget of SEK 60m. 22m of this comes from the Swedish Energy Agency.
www.laganbgg.se

Support for Solar Heating Investments, supersedes the Grant for Solar Heating (January 2009 -)
This scheme is open to applications from private individuals to companies, and is administered by the National Board of Housing. The budget for the programme totalled SEK 52.3m in 2009, and (approximately) SEK 4m in 2010. The investment subsidy is limited up to a maximum of SEK 7,500 per apartment building, and a maximum of SEK 3m per project. Funding is disbursed through provincial governments. Solar thermal collectors must meet certain quality standards to qualify for the support, and must be installed by a professional. The programme will be monitored for evaluation purposes, and subsidy recipients can be required to submit data for monitoring and evaluation.
www.boverket.se/Bidrag--Stod/Solvarmestod/

Energy declaration of buildings act – incentives for investment in lower energy buildings (October 2006 -)
The Energy Declaration of Buildings Act is part of Sweden's National Programme for Energy Efficiency and Energy-smart Construction. The Ministry of Sustainable Development, the Swedish Energy Agency, and the National Board of Housing, Building and Planning administer the programme, including a number of incentives and subsidies for energy efficient buildings. When buildings are constructed, rented out or sold, they will be subject to inspections and subsequent energy declarations designed to direct the owner in reducing energy costs thereafter. As an example of support, subsidies for the purchase of energy-efficient windows and biomass boilers are set at 30% of the cost exceeding SEK 10,000. The maximum subsidy available is SEK 15,000.
www.boverket.se

There are also incentives and subsidies administered at a regional level also, such as the Invest in Norrbotten agency.
www.investinnorrbotten.se

TURKEY

Turkey Green Building Council, (Emerging GBC)

Turkey Sustainable Energy Financial Facility
As part of this scheme, the European Bank for Reconstruction and Development (EBRD) provided a loan of $20 million to Denizbank. The money was to fund lending to local companies and households undertaking energy efficiency investments and small scale renewable investments, including geothermal, solar, biomass and biogas. Technical assistance grants from the Clean Technology Fund and the EU in collaboration with the Turkish Treasury support the project, helping Denizbank in developing financial instruments suitable for energy

efficiency projects. It will also help sub-borrowers design and implement their own part of the process, as well as reaching out to the consumer to increase the awareness about the benefits of sustainable energy investments.

UK

UK Green Building Council, (Established GBC)

The Green Deal[8] (planned)

Private finance, government administered

The Green Deal is a policy framework which will, when it comes into force in late 2010, enable private firms to offer residential consumers energy efficiency improvements at no upfront cost. The capital cost of the work is covered by a private 'Green Deal Provider' and payment is recouped through a charge on the homeowner's energy bills. This allows the consumer to see the Green Deal charge alongside the savings generated by reduction in energy use. The policy includes a 'Golden Rule' which states that these savings will be greater than or equal to the repayments, so that the consumer sees an immediate benefit. The repayment obligation will sit with the meter, transferring to any new occupier.

Consumers will be entitled to an independent assessment of the energy performance of their property, following which they will be able to choose the measures that are right for them. Works will be carried out with accredited equipment and materials. The project is aimed at reducing energy demand, saving consumers' money, and stimulating the retrofit market.

The Green Deal model will be supplemented by a new Energy Company Obligation (ECO) from the end of 2012. This will take over from CERT and provide grants to cover the cost of energy efficiency measures for low income households and hard to treat properties. This money comes from a levy on energy bills.

www.decc.gov.uk/en/content/cms/what_we_do/consumers/green_deal/green_deal.aspx

Feed in Tariffs (FiTs) (April 2010 -)

Paid for through a levy on energy bills.

This scheme incentivises small scale (less than 5MW) low carbon energy generation. Producers are paid a generation tariff based on amount of energy generated and the energy type. On top of this they are paid an export tariff. This is for energy generated which is surplus to requirement and so exported to the grid. The tariffs last 20 years for nearly all renewable; except solar PV (25 years), and micro-CHP (10 years). The electricity company passes on the cost of the scheme to their customers via charges on their energy bills, meaning that people who don't install renewable energy systems end up paying for those who do.

http://www.decc.gov.uk/en/content/cms/what_we_do/uk_supply/energy_mix/renewable/feedin_tariff/feedin_tariff.aspx

Renewable Heat Incentive (RHI)

Public finance

The Renewable Heat Incentive offers long-term financial support to renewable heat installations to encourage the uptake of renewable heat. The output of heat is to be measured and financial support calculated from the amount of eligible heat multiplied by the tariff level. Payments will be made to the owner of the installation quarterly over a 20-year period. The Gas and Electricity Market Authority (Ofgem) will administer the scheme, dealing with applications, accrediting installations, making incentive payments, and monitoring compliance with the rules and conditions of the scheme.

Initially the scheme will be targeted at big emitters in the non-domestic sector, but premium payments from a ring-fenced fund of £15m will be available to households who install renewable heating (planned to be available from July 2011). When the second phase of the RHI begins (in 2012 to coincide with the Green Deal), people in receipt of the renewable heat premium payments will be eligible for long term RHI tariff support, along with

[8] For more information see DECC's publication 'The Green Deal: A Summary of the government's proposals' at http://www.decc.gov.uk/assets/decc/legislation/energybill/1010-green-deal-summary-proposals.pdf

anyone who has installed an eligible installation on or after the 15th July 2009. Tariff levels are calculated so that they bridge the financial gap between the initial cost of conventional and renewable heating systems. There is additional compensation for an element of the non-financial cost of certain technologies.

The Green Investment Bank (2012 -)

Public finance

The Green Investment Bank is due to come into operation in 2012 with a £3bn funding base. It is a government-funded initiative that is aimed at addressing market failures currently hindering investment in the low carbon economy. The forecast is that it will be endowed with the power to borrow (and issue green bonds) come 2015/16 (or after the government has met its target for debt as a percentage of GDP). According to announcements thus far, its remit initially will cover industrial energy efficiency and offshore wind, expanding to include smart grids and smart meters in the short term and other projects which will enable a development of the UK's low carbon economy in the medium to long term.
http://www.businessgreen.com/bg/news/1894854/green-investment-bank-doors-2012

Community Energy Savings Programme (CESP) (2009 - 2011)

Public finance

CESP targets households across Great Britain, in areas of low income (4,500 areas are eligible), to improve energy efficiency standards and reduce fuel bills. The programme is funded by an obligation on energy suppliers and electricity generators. It is expected to deliver up to GBP350m of efficiency measures. CESP promotes a "whole house" approach i.e. a package of energy efficiency measures best suited to the individual property. The programme is delivered through the development of community-based partnerships between Local Authorities (LAs), community groups and energy companies, via a house-by-house, street-by-street approach. This partnership working allows CESP to be implemented in a way that is best suited to individual areas and coordinated with other local and national initiatives. Around 100 schemes are expected, benefiting around 90,000 homes and saving nearly 2.9m tonnes of CO2 emissions. CESP is expected to deliver annual average fuel bill savings for those households involved of up to GBP300. CESP commenced on 1 September 2009 and British Gas launched the first 'live' CESP scheme in Walsall in January 2010. As of 30 April 2010 there were 6 live CESP schemes.
www.decc.gov.uk/en/content/cms/what_we_do/consumers/saving_energy/cesp/cesp.aspx

Energy Efficiency Loans for SMEs (2007 -)

Public finance

This is a programme administered by the UK's Carbon Trust which provides interest free loans to help SMEs acquire and install energy efficient technologies. Loans are valued between £5,000 and £200,000, and up to £400,000 in Northern Ireland. Since the scheme began the Trust has offered over 800 loans to SMEs, worth a total of over £30m, saving an estimated 88,000 tonnes CO2 per annum.
www.carbontrust.co.uk/energy/takingaction/loans.htm

Stamp Duty Relief for Zero Carbon Homes (October 2007 -)

Public finance

To support the move to zero carbon homes, from 1 October 2007 all new homes meeting the zero carbon standard costing up to £500,000 pay no stamp duty[9]. Zero carbon homes costing in excess of GBP 500,000 are eligible for a reduction in their stamp duty bill of £15,000. However, uptake has been disappointing. As of January 2010, only 24 houses had taken advantage of the rebate[10].
www.hm-treasury.gov.uk

[9] Stamp duty is a tax charged on land and property transactions in the UK.
[10] http://www.telegraph.co.uk/sponsored/business/businesstruth/energy_and_environment/7100533/Failure-of-Gordon-Browns-zero-carbon-housing-scheme.html

Salix project (2006 -)

Public finance

Salix Finance Ltd is a private company funded by the UK Government to establish energy efficiency revolving loan schemes in the public sector. The company was set up by the Carbon Trust and is currently working with 163 public sector bodies providing over £40m for recycling funds. The money is administered in the form of interest free loans to bodies that are required to provide matched funding and establish an on-going 'ring-fenced' energy saving fund within the organisation. The administration then uses this fund to support projects across the estate that pay back into the loan fund using the energy savings they generate. Typically the level of funding available to an organisation is £250,000, but this can go up to £500,000. Projects undertaken must have proven energy savings with a payback of 5 years or less, in addition to meeting other requirements. In normal circumstances Salix will keep their funding in place until the client runs out of projects. The company also offers loans targeted at specific projects. In these cases, the investment is recouped through the consumer's energy savings.

www.salixfinance.co.uk

Landlords' Energy Saving Allowance (2004 - 2015)

Public finance

This policy provides an incentive for private landlords to improve the energy efficiency of residential properties that they let. It offers a tax credit of up to £1,500 for capital expenditure on investment in cavity/solid wall insulation, loft and floor insulation, draught proofing and hot water system insulation. An extension to cover commercial properties is currently being considered.

Thus far, take-up of the credit has been low. In 2007-2008 less that 0.2% (2050) of UK landlords took advantage of the scheme[11].

http://www.hmrc.gov.uk/manuals/pimmanual/PIM2072.htm

Reduced VAT on Energy Saving Materials (2000 -)

Public finance

Reduction to 5% as long as installed by an accredited company. The measure covers insulation, draught stripping, hot water and central heating controls, installations of solar panels, wind and water turbines, ground-source and air-source heat pumps, micro-CHP, and wood/straw/similar vegetal matter-fuelled boilers.

www.hm-treasury.gov.uk./budget/budget_2000/press_notices/bud_bud00_pressenergy.cfm

Warm Front Scheme (2000 - 2012/13)

Public finance

The Warm Front scheme provides heating and insulation improvements to households on certain income-related benefits living in properties that are poorly insulated and/or do not have a working central heating system. It specifically targets households with over-60s and under-16s in residence. The scheme is a grant system administered by Defra providing non-refundable support worth up to £3,500 (£6,000 where oil central heating and other alternative technologies are recommended). Eligible improvements: loft insulation, draught proofing, cavity wall insulation, hot water tank insulation, gas, electric, liquid petroleum gas or oil heating, glass-fronted fires. Since the scheme's introduction in June 2000, over 1.7 million households have received assistance. The budget for 2008-2011 is £874 million.

www.warmfront.co.uk/

Green Mortgages

Private finance

[11] Correspondence from HM Treasury to the Association for Conservation of Energy, 16 November 2009

'Ethical' and 'Green Mortgages' in the UK offer customers an investment which makes certain pledges to offset the carbon footprint of the home. For example, within their eco-mortgage programme the Co-operative Bank makes an annual donation to Climate Care to offset around 20% of the average home's carbon production for every year the mortgage is held. Through this programme new woods are being created in Uganda. It also has requirements for investment opportunities (e.g. avoiding companies which effect "repeated damage to the environment"). With each valuation, the Co-op Bank will provide a free Home Energy Rating, detailing a building's energy efficiency and potential energy saving measures (www.co-operativebank.co.uk).

Some, like the Ecology Building Society (www.ecology.co.uk), provide mortgages for energy efficient housing, ecological renovation, derelict and dilapidated properties and small-scale and ecological enterprise such as organic farms. These criteria ensure that those who save with it know their funds are being used for ecological benefit. The organisation's latest product, the C-Change mortgage discount, is designed to help homeowners with the cost of increasing the energy efficiency of their homes. Any mortgage funds used to install energy saving measures, such as insulation, triple glazing and renewable energy systems - such as solar panels or wind turbines - will benefit from a 1 per cent discount from the standard variable rate.
http://www.ethicalinvestment.co.uk/Ethical_Mortgages.htm

BIBLIOGRAPHY AND RESOURCES

On the EPDB website (http://www.epbd-ca.org/) you will find reports from individual countries detailing national implementation of the EPBD. For individual reports see below:
(Nov 2010) Implementing the Energy Performance Directive of Buildings (EPBD) in

For a detailed breakdown of some of the schemes mentioned here, see the EuroACE report *Making Money Work for Buildings: Financial and Fiscal Instruments for Energy Efficiency in Buildings* September 2010.

www.iea.org for list of policies related to climate change and energy efficiency from member countries.

Other useful publications:

Tackling Global Climate Change, Meeting Local Priorities, a World Green Building Council Special Report, September 2010
Financing Energy Efficiency in Buildings, BPIE, input to the European round table November 2010
The Recast Energy Performance of buildings Directive, CIBSE Briefing:
http://cibse.org/content/documents/Knowledge_Bank/EPBDBriefingFINAL2011.pdf
Financing Energy Efficiency Building Retrofits, International Policy and Business Model Review and Regulatory Alternatives for Spain, Climate Strategy and Partners: http://www.climatestrategy.es/index.php?id=19
Financing Sustainable Energy Projects through the Structural Funds and the Cohesion Fund in 2007-2013 (October 2007)
http://www.cleanvehicle.eu/fileadmin/downloads/Czech_Republic/Financing%2Bsustainable%2Benergy_7.pdf