



Department 15 – Housing Subsidies

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Subsidies for Environmentally-Friendly Housing II

GUIDELINES

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¹ Austrian Federal Constitution Act

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INTRODUCTION

The agreement between the federal and state governments in accordance with art. 15a B-VG regarding measures to reduce carbon emissions in the building sector – hereinafter shortened to the “Kyoto II Agreement” – which was compiled between November 2007 and September 2008 and then signed by the competent minister and all state governors in autumn 2008, was the reason for the executive order to amend the 1993 Housing Subsidy Act in the Austrian State of Styria and to adapt the guidelines towards ecological housing subsidies.

DEFINITION

The 15a Agreement (Kyoto II) declares a minimum heating requirement. The heating requirement is the value which arises after the application of the calculation method in accordance with directive 6 of the *Österreichische Institut für Bautechnik* (OIB – Austrian Institute for Structural Engineering) at a heating degree day of 3,400 kelvins per day per annum (typical climate). For passive houses, the heating requirement must be determined in accordance with OIB.

The following new definitions are valid for housing subsidies in Styria:

Low-energy house

Attaining or falling below the minimum requirements, as stated in the “Kyoto II Agreement” for new buildings from the year 2010:

	Heating requirements <small>total floor area</small> in kW/h/(m ² .a)	
	at a sa/vol ratio of ≥ 0.8	at a sa/vol ratio of ≤ 0.2
from 1.1.2010	45	25

Super low-energy house

Attaining or falling below the minimum requirements, as stated in the “Kyoto II Agreement” for new buildings from the year 2012:

	Heating requirements <small>total floor area</small> in kW/h/(m ² .a)	
	at a sa/vol ratio of ≥ 0.8	at a sa/vol ratio of ≤ 0.2
from 1.1.2012	36	20

Passive house

The following values apply for a carbon-neutral house:

Passive house	10 kWh/(m ² .a) in accordance with OIB
---------------	---

CONCEPTION

The following pages were drawn up for

multi-storey buildings.

For

building loans

the compulsory criteria and ECO points prerequisites apply as they do for multi-storey buildings. Page 32.

For

comprehensive renovation

the ECO 3 points apply as a supplement in a similar form to those for multi-storey buildings. Page 33.

The

comprehensive energy renovation

is a new addition. Procedure and type is based on the hitherto existing “small-scale renovation”, albeit with higher requirements and a higher subsidy. Page 35.

With the

small-scale renovation

the type of financing has been standardised. This subsidy applies for individual measures and renovation without eco-components as well as for building generation in the course of renovations. Page 37.

The

home subsidy

was adapted accordingly. Page 38.

MULTI-STOREY BUILDINGS

The methods approved to date shall be maintained and amended for the evaluation of the level of the subsidy. The incentive system stipulated in the “Kyoto II Agreement” was revised and adapted.

Overview:

The subdivision into ECO 1, ECO 2 and ECO 3 remains unchanged.
The contents of ECO 1 and ECO 2 remain unchanged.

Changes in ECO 3:

- | | | | |
|---|--|---|---------------|
| • | Decentralised heat distribution centre | • | 1 point |
| • | Minimum heating requirements for 2012 | • | 1 point |
| • | Passive house | • | 2 points |
| • | Controlled interior ventilation with heat recovery | • | 2 points |
| • | Ecological building materials | • | max. 2 points |
| • | Innovative technology | • | max. 3 points |
| • | Energy accounting | • | 1 point |
| • | Klima:aktiv housing certificate | • | 1 point |

This means:

1) Calculating the level of subsidy

is dependant on the floor area and the total area of the property ratio (supplement of up to 22%), including one-off payment for vehicle and children’s play area as well as possible unusual circumstances – up to now defined in housing subsidy section 4, whereby it is stated that special regulations apply for senior citizen’s housing and student housing. With these, the actual floor area is funded (minus lift areas and staircases) - unusual circumstances and children’s play area supplements are not awarded. Vehicle parking spaces are funded up to a number amounting to half that of the number of rooms. Maximum sizes of 50m² per senior citizen bed and 30m² per student area apply.

2) Calculating the ECO bonus points

The ECO bonus points are divided into 3 groups:

a) ECO 1: Material flow

Measures concerning

- Availability of resources
- Separability of materials and their ability to be removed
- Recycled buildings materials
- Recyclability

0 – 3 points

The weighted scoring is based on research carried out by Professor Maydl, is calculated based on building components and is to be submitted in the secondary submission by using the forms on pages 30 and 31.

b) ECO 2: OI3 index

For the calculation of the OI3 index, the

- primary energy content
- global warming potential / GWP
- acidification

are drawn upon and evaluated in the course of the heating requirements calculation. The building physics investigator needs to give their approval for the OI3 bonus points to be recognised.

0 – 3 points

c) ECO 3: Energy + Sustainability

In this group, different measures are brought together which adhere to sustainability and/or are of an energy or ecological nature.

0 – 25 points

3) The points from a), b) and c) are added together

The score attained, multiplied by 10, results in the respective ECO bonus per m² of net floor area and is added to the value calculated in housing subsidy section 4. (Increase in the total buildings costs compatible with housing subsidies). The assessment basis for the honorarium shall not be influenced by the ECO points.

For the second submission, the form on page 29 is to be used for the declaration of applicable ECO bonus points.

The non-repayable subsidy amount shall be determined at **€3.00** per point and m².

The remainder, at **€7.00/m²**, shall be supported by bank loans and repayable annuity benefits.

4) ECO supplement:

In addition to the ECO bonus points described above, there is also an ECO supplement for all building projects which fulfil the increased requirements in accordance with the “Kyoto II”. (This supplement also increases the basis for the honorarium calculation).

The ECO supplement shall be awarded as subsidy funding.

Details:

- a) For those buildings projects that conform to the minimum requirements valid from the 1.1.2010 (table, art. 3 of the “Kyoto II Agreement”) (low-energy house), a non-repayable grant of **€60.00/m²** of floor area shall be awarded.
- b) Should a building project conform to the minimum requirements valid from 1.1.2012 (super low-energy house), then a non-repayable grant of **€70.00/m²** of floor area shall be awarded.
- c) A non-repayable grant of **€90.00/m²** shall be awarded for carbon-neutral houses (passive houses).

This regulation is valid for building projects which were approved on or after the 1.4.2009 by the state government of Styria.

In addition to the ECO points, there are also
COMPULSORY criteria

These criteria are economically justifiable, take into account the importance of sustainability, are already frequently implemented nowadays and are – with the exception of solar water heating and energy accounting – not additionally funded.

Requirements for the subsidy: (COMPULSORY criteria)

- Minimum requirements in accordance with art. 15a B-VG Art. 3
- Solar water heating
- Online energy accounting
- No fossil fuels
- No building materials which may damage the environment
- Thermographic testing of the building, if required
- Measuring of air tightness if lightweight design or ventilation systems have been implemented

COMPULSORY CRITERIA

Minimum requirement in accordance with Art. 15a B-VG par. 3

The “Kyoto II Agreement” sets minimum heating requirements. These minimum requirements become considerably stricter from 1.1.2010 and 1.1.2012.

It is officially stated that these are the minimum requirements and that no exceptions are possible.

The heating requirement is the value which arises after the application of the calculation method in accordance with directive 6 of the OIB at a heating degree of 4,000 kelvins x day / year (typical climate).

For passive houses (carbon-neutral houses), the heating requirement must be determined in accordance with OIB.

Minimum heating requirements table for 2009, from 1.1.2010 and from 1.1.2012, whereby the sa/vol ratio between the values is to be linearly interpolated.

	Heating requirements <small>total floor area</small> in kW/h/(m ² .a)	
	at a sa/vol ratio of ≥ 0.8	at a sa/vol ratio of ≤ 0.2
until the end of 2009	65	35
from 1.1.2010	45	25
from 1.1.2012	36	20

Confirmation:

Confirmation from a building physics investigator acceptable for the secondary submission of minimum heating requirements (HWB) and heating requirements available for every building.

Solar-powered water heating

Use of solar energy for the heating of water and for partially-solar-powered heating.

Exceptions only possible with a statement from the State Energy Commissioner.

Requirements:

- Minimum collector yield of 350 kWh/m²a
- Measuring equipment for heat yield (heating supply to the storage device)
- Maximum energy return from the heating distribution network of 40°C
- Minimum reserve ratio using solar energy:
Either 15% of the total heating requirement for hot water and room heating or 60% of the hot water requirement.
- Must operate in “low-flow” mode (meaning that the particular mass flux should amount to 5 – 20 kg/h and m² of collector area)
- The logarithmic temperature difference Δt_{\log} of the external heat exchanger (separation between glycol flow and heating water) must be ≤ 6 kelvins.
- An energy storage device is to be used. The energy storage device insulation must be at least 20cm thick; the following requirements apply for the piping:

Pipe dimension	Minimum insulation thickness -	Minimum insulation thickness -
	pipes outside property	pipes inside property
	[mm]	[mm]
DN 15	30	20
DN 20	40	30
DN 25	40	30
DN 32	40	40
DN 40	50	40
DN 50	60	50

Online Energy Accounting

Energy accounting is compulsory for buildings projects with 10 flats or more.

Energy accounting is an instrument for the monitoring and energy observation of buildings, properties and premises. With it, usage is recorded, assessed, monitored, clearly laid-out and analysed.

Monitoring can uncover hidden potential for savings through its analysis and makes disruptive factors and defects identifiable so that you can introduce and implement measures in time.

Those system requirements which are needed for housing subsidies are displayed. Furthermore, there is a range of further components which can be useful for the convenience of application.

Detailed requirements are available at the homepage of Department 15 under “News – Energy Accounting”.

No Fossil Fuels

Since the amendment from May 2007 to the executive order of the 1993 Housing Subsidy Act, the heating of buildings in multi-storey projects and building loan projects have had to be carried out with the use of renewable energy sources, with the exception of district heating and particularly justified cases.

In areas with a supply of piped natural gas which was constructed before 1.1.2006, natural gas energy supply is possible.

In this case, condensing boiler technology with gas firing systems shall be provided.

Gas firing condensing boiler technology is the most efficient energy source in the domain of non-regenerative energy sources. Non-condensing gas-fired boilers are not permissible.

If, as an exception, gas may be used as an energy source (both as a main heating system and a supplementary heating system), a condensing boiler is to be installed. The return design temperature must not exceed 40°C.

No Building Materials which May Damage the Environment

Partially-fluorated and fully-fluorated hydrocarbons (hydrofluorocarbons and haloalkanes), as well as sulphur hexafluoride, are to be considered under the definition of environmentally-damaging halogen gases. These gases possess a particularly high level of greenhouse gas potential in comparison with CO₂ (from 1,300 to 24,000 times as much!)

Such gases are partially used in different building components (i.e. hydrofluorocarbons used in insulation panels, polyurethane foams etc.)

There are alternatives for all of these components which are competitive in price and readily available on the market.

Requirements:

No heating insulation or polyurethane foams (haloalkanes, CFCs, HFCs, HCFCs) containing halogens may be used in the construction of properties with respect to the law on the ban and restriction of partially-fluorated and fully-fluorated hydrocarbons and sulphur hexafluoride, Austrian Federal Law Gazette no. 447/2002 and the Regulation (EC) no. 2037/2000 of the European Parliament and Council from 29.6.2000 regarding substances which are damaging the ozone layer.

Thermographic Testing

Heating insulation, the quality and air-tightness of windows as well as weak thermal areas of the building shell (thermal bridges) have a crucial say in the level of heating requirement and heating costs. With the help of an infrared camera, the heat radiation can be recorded during the colder part of the year. Thermal bridges are areas where more heat is radiated to the outside, therefore they are warmer. In the outside thermograph recording, these areas are made visible with light-coloured areas (yellow, red and white). Using this, weak thermal points and also hidden constructional defects of buildings are visible immediately.

Requirements:

If required, an investigation must be carried out by an authorised company or expert.

The investigator shall indicate defects in writing and the developer must respond correspondingly.

With defects discovered by the test, a response and renovation measures are to be submitted by the developer.

Air-tight Building Shell (Measuring Air-tightness)

Leakages in the building shell are one of the most common causes for damage to buildings that is caused by damp. These leakages mean that at certain sections, large amounts of damp, warm air from the interior of the building penetrate the building shell construction. This air cools down on its way outside and the water vapour which the air contains then condenses, leading to a deterioration of the heat insulation, as well as causing damage to the building due to damp. Unnecessarily high losses of heat also occur due to the increased exchange of air through the cracks and joints.

With sound planning and construction, the completion of a building shell that is as air tight as possible can be achieved at a low level of extra cost. For this reason, the air tight construction of the building shell is to be aimed for, as substantiated by air-tightness tests.

The benefits to the customer include an increased level of safety against building damage, better levels of noise protection (leakages in the building shell are also weak points from an acoustic point of view), as well as clear savings of energy. In this context, with an improvement in air tightness of $n_{50}=3.0 \text{ h}^{-1}$ (minimum requirement of OIB Guideline 6) to 1.5 h^{-1} , the HWB (heating requirement) improves by approx. 5.5 kWh/m^2 total floor area (TFA) /annum. With an improvement of the air tightness of $n_{50}=1.5 \text{ h}^{-1}$ to 0.6 h^{-1} , by approx. 3.2 kWh/m^2 TFA/annum.

Prerequisites:

Time of measurement:

When the insulation measures are complete and the final surface has not yet been finalised.

The measurement is to be arranged by the developers and to be completed by an authorised company. However, measurements cannot be carried out by the construction firm.

Proof:

Presentation of measurement protocol pursuant to EN 13829
for houses of lightweight construction
for buildings with ventilation systems
for passive houses

$n_{50} < 3.0 \text{ h}^{-1}$
 $n_{50} < 1.5 \text{ h}^{-1}$
 $n_{50} < 0.6 \text{ h}^{-1}$

Measurements:

Up to	10 flats	every 3 rd home
>	10 flats	every 5 th home

ECO BONUS POINTS

(Incentive System)

Point Awarding Scheme

The number of points must be stated using the form for the 2nd technical report and it must also be listed in this way. No further changes are possible.

The supporting documents are to be provided pursuant to the prerequisites; prior to the presentation of the final invoice at the latest.

All additional points are lost in the event of non-compliance!

The costs of possible fees or reports are to be covered by the bonus points and may not be added to the fees.

a) ECO 1: Material flow

(Resources, removability, recyclability)

General / Explanations:

This evaluation model deals with part of the building material specific aspects of the Art. 15a provision.

It intends for the building materials that are used to be taken into consideration via the approximate distribution of materials from the most important groups of construction components, which on the basis of experience, are always of a comparative size in multi storey housing constructions.

This means that the extent to which the building materials and constructions can be optimised according to environmental / eco guidelines is evident to the planners and developers during the planning stage.

The determination of the ECO1 – points occurs in accordance with page 30 of the form and page 31 of the evaluation sheet.

≥ 30 points

≥ 40 points

≥ 50 points

☀
☀ ☀
☀ ☀ ☀

max. 3

b) ECO 2: OI3 Index

General / Explanations:

The classification occurs according to the OI 3-evaluation figure on the basis of three Eco-figures: the non-renewable primary energy content (PEC n.e.), the global warming potential (GWP) and the acidification potential (AP) of the construction and insulation materials which are used in the building shell and the intermediate ceilings.

Calculation: OI 3 lc-evaluation figure = $3 \cdot (PEC/3 + GWP/3 + AP/3) \cdot (2 + lc)$ [-]

To use the eco points, the OI 3 lc evaluation figure must be shown. For valid proof, either the products that are listed in the Austrian Construction Booklet (www.baubook.at) are to be used, or products that have been tested according to the equivalent procedural norms of a member state of the European Economic Area. The simplified procedure according to the residential building server is also permitted.

The ECO 2-bonus points are to be confirmed by the building physics suitability inspector.

≤ 70 points



≤ 50 points



≤ 30 points



max. 3

c) ECO 3: Energy & Sustainability

- | | |
|---|------------|
| 1. Heating with renewable raw materials | ☀ ☀ ☀ |
| 2. Heat pump heating system | ☀ |
| 3. Connection to district heating system | ☀ |
| 4. Solar-powered water heating | ☀ ☀ |
| 5. Controlled living area ventilation with heat recovery | ☀ ☀ |
| 6. Controlled living area ventilation (single or compact devices) | ☀ |
| 7. Optimisation of heating and distribution systems | ☀ |
| 8. Decentralised heat transfer stations | ☀ |
| 9. Achievement of the minimum heating requirement for 2012 | ☀ |
| 10. Passive house | ☀ ☀ |
| 11. Ecological construction materials | max. ☀ ☀ |
| 12. Wooden-framed windows | max. ☀ ☀ |
| 13. Innovative technology | max. ☀ ☀ ☀ |
| 14. Urban planning aspects | max. ☀ ☀ |
| 15. Soil sealing, use of rain water | ☀ |
| 16. Indoor air quality | ☀ |
| 17. Safety precautions | ☀ |
| 18. Online energy accounting | ☀ |
| 19. klima:aktiv housing certificate | ☀ |

total 25

Heating with NARAWO (Renewable Raw Materials)

Renewable raw materials are products that are created on the basis of agriculture and forestry and which are put to use in the non-food area and/or in the production of heat, electricity and other forms of energy.

Primarily, these include wood (chip wood, wood chips, pellets) products or products such as soya, maize, barley, rye and rapeseed for example, that are used for industrially operated firing installations with an operating licence.

Prerequisites:

The heat supply system in the building must be supplied in full with renewable raw materials – deducting possible solar incursions, heat pump incursions and/or innovative technologies. At full system load, a thermal efficiency of 85% must be achieved.

With automatically fuelled central heating boilers for biogenic fuels, the lowest boiler output must total 50% of the building heating load achieved, otherwise load balancing storage heaters are to be installed.

A WBF 3, as signed by the State Energy Commissioner, must be provided in all cases.

Points: ☀ ☀ ☀

Heat pump heating system

The annual performance coefficient for heat pump heating systems must be at least 4. In passive houses, this may amount to 3.5. This performance coefficient is to be confirmed by the installation company using the “*Leistungsgarantie Wärmepumpe*” (Heat Pump Performance Guarantee) form.

For the compressor and the auxiliary drive of the heat pump, a separate electricity meter is to be installed. In addition to this, an adaptor is also to be provided at a suitable location for the installation of a heat meter. This adaptor must have both a shut-off function as well as a ventilation fitting that is installed both prior and subsequent to the measuring section unless a heat quantity meter has been installed.

The system is to be put into operation and adjusted by a qualified professional (hydraulic adjustment); the calibration data and measurement data are to be recorded in a commissioning report, and a copy of the commissioning report is to be given to the operator and to be kept in a safe place by them.

All heating and hot water pipes, including fittings in unheated rooms, are to be equipped with the corresponding heat insulation.

A WBF 3, as signed by the State Energy Commissioner, must be provided in all cases.

Note:

The annual performance coefficient of 4 is extremely difficult for air-water-heat pumps to attain.

Points: ☀

Connection to the district heating system

In article 2 of the 'Kyoto II Agreement,' district heating is described as being an innovative climate-relevant heating and hot water production system as follows:

- a) A highly efficient cogeneration system in terms of Directive 2004/8/EC of the European Parliament and of the Council on the promotion of cogeneration that is based on a useful heat demand in the internal energy market, ABl. no. L 52 of 21.2.2004, p. 50 and other waste heat which otherwise remains unused.
- b) With a renewable energy content of at least 80%.

A WBF 3, as signed by the State Energy Commissioner, must be provided in all cases.

Prerequisite:

A heating supply contract that complies with WBF 3.

Points: ☀

Solar-powered water heating

Although the solar hot water production is a mandatory-criterion, two ECO bonus points are awarded for this ecologically important measure.

Refer to the prerequisites on page 10.

Points: ☀☀

Controlled Ventilation of Living Areas

Central devices with heat recovery using heat exchanger

The calculation must be carried out pursuant to the Austrian Standard ÖNORM B 8110-6. The heat recovery index of the heat exchanger N_v must demonstrate at least 60% and is to be substantiated with a certificate.

If possible, the fresh air is to be pre-heated through correspondingly dimensioned ground heat exchangers, and the installation guidelines for the combination with an upstream ground heat exchanger are also to be complied with. Electrical defrosting devices may not be used under any circumstances.

The power consumption of the ventilators may not exceed a gross volume of 0.4 W / m³. In the private home, possible electrical resistance back-up heating elements built into the supply air flow may not exceed a connected electrical load of 2 kilowatts; in multi-storey constructions, the heating of the supply air using electrical resistance heating elements is only permitted with the provision of a positive certificate from the Energy Commissioner.

Air exchange rate n :

The energetically effective air exchange rate n with heat recovery from the exhaust air and the heating of the supply air is calculated (pursuant to EN 823) as follows:

$$n = 0.4 \times (1 - n_v) + n_x \text{ (1/h)}$$

If the maximum hourly volume flow which can be transported by the ventilation heat recovery system totals less than 30% of the gross volume of the building, the energy that is recovered will only be considered on a pro rata basis.

With a ground heat exchanger (*Erdwärmetauscher EWT*), a heat production level of 20% can be included in the utilisation level for the heat recovery (*Wärmerückgewinnung WRG*) pursuant to the following formula.

$$N_v = 1 - (1 - n_{WRG}) \times (1 - n_{EWT})$$

The test must be carried out by an appropriately authorised or accredited institution. A thermodynamic test must be delineated which is carried out with at least two volume flows and three outside air conditions which clearly differ from each other. The corresponding volume flow, mass flow, enthalpy flow and condensation levels and/or rewetting levels are to be stated and the resulting key figures that are calculated are to be exemplified through the use of the calculation formula. The electrical outputs of the auxiliary equipment (e.g. ventilators) are to be stated, if at all possible stating the method in which they are considered in the calculation. A schematic presentation of the test specimen, in which the geometric dimensions as well as the flow-ratios are clear, should be enclosed.

The specific power consumption (specific fan power, SFP) of the ventilators in the ventilation system must conform with OIB Guideline 6, Class I, pursuant to ÖNORM EN 13779.

Losses of ventilation heat which occur as a result of leaks in the building are taken into consideration through the additional air exchange rate N_x , where this value (corresponding with OIB Guideline 6) is to be set at 0.06 with certification of an air tight building shell (air tightness measurement n_{L50} not exceeding 0.6), and at 0.2 without such certification.

Pursuant to OIB RL6, a heating requirement that does not exceed 8 kWh/m² may be taken into consideration for the minimum HWB requirements (HWB heating requirements).

Points: ☀ ☀

Controlled Ventilation of Living Areas

Single or compact devices with heat recovery using a heat exchanger and/or heat pump

The use of single devices which must meet the following requirements:

Max. air output:	at least 50 m ³ /h
Output control:	at least 3-stage
Heat provision level:	least 70% at 30 m ³ and external temperature of 10°, 82% RH, interior temperature of 21°
Power consumption:	max. 20 W
Sound pressure level:	max. 35 dB
Supply air filter	
Operating status display	
Automatic sealing device	

As these devices do not influence the full air volume of a home in the normal case and are not continually in operation, the following simplified formula applies to the EKZ calculation:

2/3 of the air volume; operating time of 12 hours.

Pursuant to OIB RL6, a heating requirement that does not exceed 8 kWh/m² may be taken into consideration for the minimum HWB requirements.

This Eco-point is also awarded for heat recovery using a heat pump.

Points: ☀

Optimisation of Heating and Distribution Systems

1) System optimisation:

Heating system optimisation means the exact adjustment, alignment and pipe-routing of a system appropriate to the requirements of the residents of a home. A heating system maintenance contract with a lifespan of at least 15 years is also to be concluded.

Numerous metrological tests have shown that the heat supply systems in multi storey buildings generally have a considerable potential for optimisation. This stretches from excessive temperature levels, huge losses from storage heaters and piping systems to excessive electricity consumption on the part of pumps and power units. If the responsible technician analyses the complete heat supply system, as supported by measured values in the first weeks of operation, this can lead to the considerable improvement of this situation. The optimisation steps based on this lead to huge increases in efficiency for the complete heat supply system over the course of several years.

Prerequisite:

- Signed commissioning and settings report (1)
(1) these settings are to take place and be documented for all combination valves and differential pressure controllers. It is also to be proven that the thermostat valves are equipped with pre-set k v s inserts. The setting values of all of the return flow temperature limiters in the home stations are also to be documented.
- Proven temperature profile of the representative probe positions (2) of the complete heat supply system
(2) these are the supply flow- and return flow temperatures in every hydraulic circuit (primary circuit and secondary circuit of the solar system as well as that of the conventional heat production and the heat distribution network) as well as the collector probe, boiler probe and 3 probes of the energy storage device.
- Signed maintenance contract
- The insulation system for the energy storage device must total at least 20 cm. The following prerequisites apply to the pipes:

	Minimum insulation thickness	Minimum insulation thickness
Pipe dimensions	Pipe in external area (mm)	Pipe in interior area (mm)
DN 15	30	20
DN 20	40	30
DN 25	40	30
DN 32	40	40
DN 40	50	40
DN 50	60	50

2) Cold water meter & cold water saving technology per home:

Calibrated cold water meter
 WC-flush volume dosage
 Shower head with max. 9 l/min flow rate at 3 bars
 Wash-basin with max. 6 l/min flow rate at 3 bars

Water-saving fixtures and fittings are now compulsory according to §2, par. 6.

Points: ☀

Decentralised Heat Transfer Station

Through this system, it should be possible to guarantee a form of heat distribution and hot water production that depends on the levels of demand, and which is continuous and individually adjustable.

In addition to this, an exact allocation of the level of heat and water consumption is guaranteed for every home.

Prerequisite:

The use of a central heating buffer storage system, distribution of heat via two-line-network and use of decentralised heat transfer stations for every home.

The design temperatures (at normal external temperature) of the heat emitting system (radiators) may not exceed 65/40. With radiators, the room temperature control is to occur with thermostat valves.

The home stations have to demonstrate the following primary components:

- Heat exchanger for the heating of the domestic water in the flow-through system
- Proportional controller without auxiliary power supply for the control of the domestic water temperature
- Circulation bypass valve for maintaining pipe heat levels
- Differential pressure controller
- Dirt trap
- Heat meter or cold water meter in the intake for the hot water exchanger (to measure the hot water consumption)
- Cold water meter

Points: ☀

Achievement of the Minimum Heating Requirement for 2012

(Super-low energy house)

Along with the introduction of new minimum requirements for insulation measures in the building shells of residential properties, this eco-bonus represents a further support measure in the form of an incentive.

Prerequisites:

If the minimum HWB requirement according to Art. 3 of the 'Kyoto II Agreement' valid subsequent to 1.1.2012 is either achieved or fallen short of.

Proof:

Confirmation of the building physics suitability inspector for the second submission.

Points: ☀

Passive House

As an incentive for the construction of highly energy efficient passive houses (carbon-neutral houses) – along with other measures – two ECO-bonus points are awarded.

Proof:

Confirmation of the building physics suitability inspector for the second submission.

Points: ☀☀

Ecological Building Materials

In terms of § 44 *Steiermärkisches Baugesetz* (Styrian Building Act), as a rule, building materials may only be utilised which correspond to the usability provisions set out in the Styrian Building Materials Act from the year 2000.

In addition to this, through this measure, builders should be forced to use building materials which demonstrate excellent characteristics throughout the entire life cycle (ecologically tested building materials).

One ECO bonus point is awarded if construction products are used in 80% of the required heat insulation that have one of the following test marks:

- IBO – The Austrian Institute for Healthy and Biological Building (www.ibo.at) or
- The Austrian Eco Label (www.umweltzeichen.at), or
- Natureplus (www.natureplus.de).

One ECO bonus point will also be awarded if the overwhelming proportion of the wall and ceiling construction sections are completed with construction products that have one of the aforementioned test marks.

Points: max. ☀ ☀

Wooden-framed windows

Wood is a renewable, ecologically high quality building material; the availability of wood as a resource is highly satisfactory, and an excellent overall picture results on consideration of the life cycle and/or the CO² emissions.

This ECO point is awarded if all of the windows and/or patio doors of a building are completed in wood.

Their combination with externally positioned aluminium profiles leads to additional positive aspects.

If a wood-aluminium construction is chosen then 2 points are awarded.

In addition to a comprehensive renovation:

2 ECO points are also awarded in the event of a comprehensive renovation of the existing wooden windows.

Points: max. ☀ ☀

Innovative Technology

Innovative technologies are applications which have not generally been tried and tested, but which are promising for the future. In the context of technical progress, it is appropriate and necessary to support such technologies in their breakthrough and to support them, although it is also the case that the ultimate responsibility lies with the developer.

Subsidy prerequisites:

The use of innovative ecological technologies such as fuel cells, a photovoltaic system and/or combinations of different systems which have a high level of innovation or similar.

Points: max. ☀ ☀ ☀

Urban Planning Aspects

A: Multi-storey buildings:

This represents a further possibility for coordinating the construction of multi-storey buildings in terms of urban planning. This means the further encouragement of optimum plots of land which have an appropriate infrastructure. If the quality attribute of 'very suitable' appears in the WBF 9 document, which is to be filled in by the local urban planner and local authority, then the Residential Building Committee (*Wohnbautisch*) is able to specify an 'urban planning bonus point'. If the Residential Building Committee is convinced that the plot of land is optimal and sustainable, 2 points will be awarded.

B: Comprehensive renovation:

Although properties requiring renovation are existing buildings, urban planning coordinating measures can also be implemented in this context. The improvement of the living environment is also to be viewed as being relevant to the land-use planning.

If the 'Renovation Residential Building Committee' have plans which demonstrate very positive effects with regard to the improvement of the quality of the space, the design of the external facilities, the gutting of the courtyard and similar, the Residential Building Committee can award either one or two bonus points.

As the evaluation is difficult to negotiate using general criteria for existing buildings, decisions are taken on a majority basis for each individual project before the Renovation Residential Building Committee.

Points: max. ☀ ☀

Soil Sealing, Use of Rain Water

The sealing of near-natural surfaces is continuing apace and plays a contributing part in the build up of water masses that cannot be controlled during periods of heavy rain. The responsible management of the resources of water and soil is an important component of ecological construction; the limited sealing of surfaces also creates a good micro-climate.

To be able to earn this bonus point, it is possible to choose between 3 different variants.

- 1) Sealing of external surfaces of max. 1 m² per 10 m² of net floor space with a run-off coefficient which is greater than 0.7
Patios and passageways are not included in the calculation. Access roads are calculated starting from the boundary of the plot of land with the exception of construction projects (BV) with more than 15 living units.

or

- 2) The greening of at least 50% of the roof surface (70% with construction projects that include underground parking)

or

- 3) Use of rainwater and surface area seepage

Use of rain water for gardens and external areas with the following storage capacities:

for terraced homes	500 l/home
for flats	200 l/home
minimum storage volume	4 m ³

For near-natural area or trough seepage over a cultivated, green layer of soil, depending on the permeability of the soil, 10 – 20% of the sealed surfaces is necessary and is to be indicated. Precipitation water from areas of roofing > 50 m² which are covered with either zinc or copper may neither be stored nor collected.

Points: ☀

Indoor Air Quality

People spend up to 90% of their time indoors. This means that the interior air may only contain the smallest possible quantities of substances that are either potentially dangerous or damaging to health, such as solvents or formaldehyde. The use of building materials which do not contain harmful substances, and their correct application, makes living areas more healthy. Ventilation systems provide the constant extraction of excessive levels of damp, of pollutants and of CO².

Compliance with the following prerequisites is required:

- Construction adhesives which meet EMICODE EC1
- Construction adhesives (primers, fillers, undercoats, grouts, flooring adhesive, tiling adhesive) may only be used which are certified according to EMICODE EC1 ('very low in emissions').
- Treatment of flooring and other surfaces with a maximum 8% solvent content; aromatic-free.
- The solvent proportion of surface coatings such as wooden flooring, parquet flooring etc. (varnishes, oils, wax ...) may amount to a maximum of 8%. Sealants used on concrete or screed should generally be solvent-free (VOC-free). The use of aromatic hydrocarbons is not permitted. Coatings which are completed in-factory are not taken into consideration. Ready-to-lay parquetry (UV-toughened) satisfies the requirements.
- Wall and ceiling paint and wallpaper glue must be solvent, biocide and softener free.
- All products used as interior applications (incl. latex paints) must be solvent free, biocide free (not including hazardous can preservatives) and low in emissions (these are generally called 'ELF attributes').
- Metal and wood varnishes/paints may only have a maximum 5% solvent content and must be aromatic-free.
- With all interior applications, the solvent content may not exceed a maximum percentage mass of 5%. Aromatic hydrocarbons are not permitted. In all other cases, the limit values specified by the Austrian Environmental Mark (*Österreichisches Umweltzeichen*) are to be complied with.

Points: ☀

Security Precautions

This bonus point is awarded if A) B) or C) has been completed.

A)

- 1) Child safety box
- 2) Smoke alarm
- 3) Burglar-proof front doors for all floors
- 4) Burglar-proof terrace doors and windows on the ground floor

For 1) Child safety box:

Modelled on the child safety box drawn up at that time by the Austrian Committee for Accident Protection in Childhood the following is to be provided if required by residents:

A safety box with at least the following content:
oven guard, oven doorstop, safety lock, window locks, plug socket cover, drawer stops, edge protectors, cupboard lock, doorstop, fridge lock

For 2) Smoke alarm:

One photoelectric smoke alarm with VcS certificate and 9 volt battery. In accordance with the standards for domestic smoke alarms EN ISO 12239 one unit per room and/or kitchen.

For 3) Burglar-proof front doors for all floors:

The safety doors must fulfil the conditions of the Austrian standard ÖNORM B5338 WK 2 and be fitted with a high-security cylinder.

For 4) Burglar-proof terrace doors and windows on the ground floor:

The terrace doors and windows on the ground floor must fulfil the conditions of the Austrian standard ÖNORM B5338 WK 2

B.)

Alarm system for each flat in a building project and smoke alarm for each room (see for 2).

C.)

Preventive measures in the building entrance area (e.g. cameras) or for underground garage security (e.g. quick closing doors) and smoke alarm in each room (see for 2)

The systems mentioned in points B) and C) must be fitted by company recognised by OVE-VSÖ-VVÖ which must have the ÖZS certificate (Austrian Certification Body for Security Technology).

Points: ☀

Online Energy Accounting

Although energy accounting is a compulsory criteria this ECO point is to document the importance of online monitoring.

Energy accounting is an incentive for building projects with less than 10 flats and for comprehensive renovation.

For detailed description see page 11.

Points: ☀

klima:aktiv Housing Certificate

A climate protection initiative was established by the Austrian Federal Ministry for Agriculture, Forestry, Environment and Water Management with klima:aktiv, which aims at reducing greenhouse gas emissions in the sectors of building/living, renewable energy providers, traffic and municipalities and using high quality planning and design shall guarantee high ecological quality, a long service life, energy efficient operation and a high level of comfort.

klima:aktiv housing is the section which deals with new builds.

The catalogue of criteria for klima:aktiv is divided into 4 sections: planning and design, energy and supply, building materials and construction, comfort and air quality.

For each of these sections there are a maximum number of achievable points but also a minimum requirement. The preconditions for gaining points are described in great detail in the catalogue of criteria and you can also access the procedure for acquiring the certificate at www.klimaaktivhaus.at.

Points: ☀



File No.: _____	The State of Styria
Subsidy applicant: _____	
Building project: _____	

EVALUATION OF ECO BONUS POINTS

For multi-storey buildings, *Wohnbauschek* building loan

Only ECO 3 applies to comprehensive renovation

Eco 1: material flow, dismantling, recyclability			
Related measures:	Availability of resources Separability Recycling building materials Recyclability	0 – 3 points	..... points
Eco 2: OI3 - Index			
Related evidence	Primary energy content / PEC Greenhouse gas potential / GGP Acidification / AP	0 – 3 points	..... points
Eco 3: Energy + sustainability			
	1. Heating with NAWARO	3 points	.....
	2. Heat pump heating system	1 point	.....
	3. Connection to district heating	1 point	.....
	4. Solar-powered water heating	2 points	.....
	5. Controlled ventilation with heat recovery	2 points	.....
	6. Controlled ventilation (single or compact unit)	1 point	.....
	7. Optimisation of heating and distribution systems	1 point	.....
	8. Decentralised district heating system	1 point	.....
	9. Attainment of the minimum heating requirements for 2012	1 point	.....
	10. Passive houses (carbon-neutral houses)	2 points	.....
	11. Ecological building materials	max. 2 points	.....
	12. Wooden-framed windows	max. 2 points	.....
	13. Innovative technology	max. 3 points	.....
	14. Interior design aspects	max. 2 points	.....
	15. Soil sealing, use of rain water	1 point	.....
	16. Quality of the interior air	1 point	.....
	17. Security precautions	1 point	.....
	18. Energy accounting	1 point	.....
	19. klima:aktiv housing certificate	1 point	.....
		0 – 25 points	..... points

The Housing Subsidy Department reserves the right to have the compliance with bonus points randomly checked by an internal or external expert. Non-compliance with the prerequisites automatically means the loss of all bonus points!

.....
Regional building supervision
(Name and signature)

.....
Signature of subsidy applicant
and/or the developer

FORM FOR THE EVALUATION OF ECO 1 POINTS

Supporting walls	Which® material(s) is/are used for the load bearing structure?
	Assessment based on:
Non-supporting walls	Which® material(s) is/are used for the load bearing structure?
	Assessment based on:
Ceiling above the cellar	Which® material(s) is/are used for the load bearing structure?
	Assessment based on:
Standard floor ceiling	Which® material(s) is/are used for the load bearing structure?
	Assessment based on:
Roofing	Which® material(s) is/are used for the water-deflecting surface?
	How are they laid? (only relevant with sealing webs)
	Assessment based on:
External walls insulation	Which® insulation material(s) is/are used?
	How are they fixed?
	Assessment based on:
Façade cladding	Which® material(s) is/are used?
	How are they fixed?
	Assessment based on:

ECO 1 FORM - ASSESSMENT

Assessment criteria		Transport radius max. 250 km Yes No		Points	Weight	Weighted points
Shell						
Availability of resources						
B1	Supporting walls	<input type="checkbox"/>	<input type="checkbox"/>	2	.....
B2	Non-supporting walls	<input type="checkbox"/>	<input type="checkbox"/>	2	.....
B3	Ceiling above cellar	<input type="checkbox"/>	<input type="checkbox"/>	1	.....
B4	Standard floor ceiling	<input type="checkbox"/>	<input type="checkbox"/>	3	.....
B5	Roofing	<input type="checkbox"/>	<input type="checkbox"/>	1	.....
Separability / Dismantling						
B6	Supporting walls	<input type="checkbox"/>	<input type="checkbox"/>	2	.....
B7	Non-supporting walls	<input type="checkbox"/>	<input type="checkbox"/>	2	.....
B8	Ceiling above cellar	<input type="checkbox"/>	<input type="checkbox"/>	1	.....
B9	Standard floor ceiling	<input type="checkbox"/>	<input type="checkbox"/>	3	.....
B10	Roofing	<input type="checkbox"/>	<input type="checkbox"/>	1	.....
Recycling materials						
B11	Supporting walls	<input type="checkbox"/>	<input type="checkbox"/>	2	.....
B12	Non-supporting walls	<input type="checkbox"/>	<input type="checkbox"/>	2	.....
B13	Ceiling above cellar	<input type="checkbox"/>	<input type="checkbox"/>	1	.....
B14	Standard floor ceiling	<input type="checkbox"/>	<input type="checkbox"/>	3	.....
B15	Roofing	<input type="checkbox"/>	<input type="checkbox"/>	1	.....
Recyclability						
B16	Supporting walls	<input type="checkbox"/>	<input type="checkbox"/>	2	.....
B17	Non-supporting walls	<input type="checkbox"/>	<input type="checkbox"/>	2	.....
B18	Ceiling above cellar	<input type="checkbox"/>	<input type="checkbox"/>	1	.....
B19	Standard floor ceiling	<input type="checkbox"/>	<input type="checkbox"/>	3	.....
B20	Roofing	<input type="checkbox"/>	<input type="checkbox"/>	2	.....
Development						
Availability of resources						
B21	External walls insulation	<input type="checkbox"/>	<input type="checkbox"/>	2	.....
B22	Façade cladding	<input type="checkbox"/>	<input type="checkbox"/>	1	.....
Separability / Dismantling						
B21	External walls insulation	<input type="checkbox"/>	<input type="checkbox"/>	2	.....
B22	Façade cladding	<input type="checkbox"/>	<input type="checkbox"/>	1	.....
Recyclability						
B21	External walls insulation	<input type="checkbox"/>	<input type="checkbox"/>	2	.....
B22	Façade cladding	<input type="checkbox"/>	<input type="checkbox"/>	1	.....
Sum of weighted points: equals eco points:					 —

WOHNBAUSCHECK BUILDING LOAN

Valid from 1st December 2009

The requirements for *Wohnbauschek* building projects are the same as for multi-storey building projects.

According to the “Kyoto II Agreement” the stricter heating requirements shall also apply here to the new build (01.01.2010, 01.01.2012)

The compulsory criteria and ECO points requirements shall also apply as with the multi-storey building. The maximum amount for implementing ecological measures (ECO points) may not exceed €150.00 per m² floor space (applies to I. and II.).

ECO bonus points:

I. Subject subsidy

The determined bonus points are multiplied by 5. This calculated number equals the subsidy loan increase (€750.00) according to §12 Paragraph 2 of the implementing regulation on WFG 93 [*Housing Subsidy Act*].

This increase shall only apply to building projects where ECO points were accredited with their consent.

The maximum sales costs are basically €2,550.00 per m² floor space including VAT.

II. Property subsidy

Applies to applications for approval according to § 22 Styrian Housing Subsidy Act 1993, which are submitted to the Office of the State of Styria, Housing Subsidy Department after 30.11.2009.

If the sales price of € 2,550.00 per m² floor space including VAT should be exceeded due to ecological measures (bonus points), which is in principle possible, corresponding evidence must be provided. The evidence shall be presented in the form of a final invoice after the building project is completed and it must be evidenced that the extra costs accrued are not covered by the subsidy contribution.

The subsidy contribution is € 5.00 per bonus point and m² of fundable floor space and shall be paid at the building company's request upon presentation of the legal utilisation permit and/or in case of the maximum sales costs (€ 2,550.00) being exceeded as part of the approval of the final invoice.

For *Wohnbauschek* building projects all required documents shall be presented already on first submission (Housing Subsidy Board).

COMPREHENSIVE RENOVATION

The minimum values contained in the “Kyoto II Agreement” also apply to comprehensive renovation in the same way they apply to comprehensive energy renovation.

Table of minimum values:

Heating requirements <small>total floor area</small> in kW/h (m ² .a)	
at a sa/vol ratio of ≥ 0.8	at a sa/vol ratio of ≤ 0.2
75	35

In relation to the sa/vol ratio interpolate values linear between these values.

Exceptions are possible with valuable buildings, with these a reduction in heating of at least 30% should be evidenced against the original condition. Exceptions can also be possible e.g. with the renovation of individual relocated flat in a building. However in principle the whole structure should be comprehensively renovated.

The COMPULSORY criteria dated 15.05.2006 are still valid. The item “reduction in energy of at least 30%” is replaced by the “minimum values” table. On the subject of the “building physics suitability test” it is stated that in principle new building standards are also required regarding sound insulation etc. It is specified that exceptions are permitted with unaltered existing elements.

COMPULSORY criteria:

- Type of heating according to the State Energy Commissioner’s report (WBF 3)
- Calculation of heating requirement before and after renovation.
- Minimum heating requirement according to table
- The multi-storey building requirements apply to new build parts.
- Heat technology with new gas and oil firing systems.
- Air-tightness measurements with attic conversions as with multi-storey buildings.
- Building physics suitability test as with multi-storey building, is compulsory
- From 01.01.2010:

Energy certificates for the portfolio (before renovation) and after renovation shall be issued and presented to Department 15 in paper format.

As up to now the number and requirements of ECO 3 bonus points shall apply as with multi-storey buildings, all bonus points (which have been partially reformulated and reweighted) are also possible for comprehensive renovation.

ECO 3 Bonus Points:

1. Heating with renewable raw materials	☀ ☀ ☀
2. Heat pump heating system	☀
3. Connection to district heating system	☀
4. Solar-powered water heating	☀ ☀
5. Controlled living area ventilation with heat recovery	☀ ☀
6. Controlled living area ventilation (single or compact devices)	☀
7. Optimisation of heating and distribution systems	☀
8. Decentralised heat transfer stations	☀
9. Achievement of the minimum heating requirement for 2012	☀
10. Passive house	☀ ☀
11. Ecological construction materials	max. ☀ ☀
12. Wooden-framed windows	max. ☀ ☀
13. Innovative technology	max. ☀ ☀ ☀
14. Urban planning aspects	max. ☀ ☀
15. Soil sealing, use of rain water	☀
16. Indoor air quality	☀
17. Safety precautions	☀
18. Online energy accounting	☀
19. klima:aktiv housing certificate	☀

total 25

The non-repayable subsidy contribution shall be determined
at **€7.00** per point and m².

The subsidy rates were rounded from	€908.00 to €910.00
and/or from	€1,126 to €1,130
the lift supplement is	€145.00

**In future there are the following subsidy rates for
falling below the minimum requirements:**

For low energy house standard (new build value 2010)	fixed rate + €40.00
For passive house standard	fixed rate + €70.00

For definition see page 4.

Certification by the building physics suitability inspector is required for the approval of these subsidy rates (and the ECO bonus points associated with them).

COMPREHENSIVE ENERGY RENOVATION

These subsidy options were reintroduced as a result of the “Kyoto II Agreement”.

As a subsidy either a non-repayable 30% annuity subsidy for a bank loan with a term of 14 years or a one-off non-repayable subsidy contribution of 15% for approved costs to a maximum of €30,000.00 shall be granted for 3 ecological measures if compliance with minimum heating requirements is achieved. Supplements of up to a maximum of €50,000.00 total costs per flat can be given depending on the number of ECO points.

As the name already states this option is geared towards renovating the heating systems of existing buildings i.e. the buildings have already been lived in for a long time, the reconstruction of flats is not subsidised.

Procedure and type is based on the hitherto existing “small-scale renovation”, albeit with higher requirements (and a higher subsidy).

Definition:

“Comprehensive energy renovation” is time-related renovation work on the building’s shell and/or building utilities if at least **three** of the following elements of the building shell and building equipment shall be renewed or largely repaired together:

- Windows
- Top floor ceiling, roof insulation
- Façade
- Cellar ceiling
- Energy relevant systems

If less than three parts are being renewed or repaired or the minimum requirements according to the table are not met, or it is not verified that the work being professionally carried out by licensed companies, then the building project cannot be subsidised with this option.

➤ From 01.01.2010:

Energy certificates for the portfolio (before renovation) and after renovation shall be issued and presented to Department 15 in paper format.

After carrying out the renovation work a list of ecological measures as well as the authorised companies’ invoices shall be presented and it shall be confirmed that the quality complies with the heating calculation rate.

Department 15 reserves the right to carry out random tests of HWB heating calculations officially or by an external expert.

Minimum requirements for comprehensive energy renovation, when interpolating values linear between the values.

Heating requirements <small>total floor area</small> in kW/h (m ² .a)	
at a sa/vol ratio of ≥ 0.8	at a sa/vol ratio of ≤ 0.2
75	35

Exceptions can be granted for valuable buildings however the output heating value should be improved by at least 30%.

Only costs which are proved by receipt and whose proper implementation has been certified by licensed (authorised) companies can be approved. These invoices should not be more than 1 year old.

Eco points:

a) Heat insulation

each 1 point - if falling below the minimum requirement by at least 15%
- for the use of ecological heat insulation

2 points - if falling below the minimum requirement by at least 30%

b) Building equipment

1 point when installing building equipment based on renewable energy

2 points when installing/renovating at least two systems or a combined system based on renewable energy for heating or hot water production

For a) and b) there is a total of a maximum of 4 eco points possible.

Note:

Maintenance and improvement work on a minor scale which would fall into the "small-scale renovation" prerequisites can only have a maximum of 25% of this type of subsidy allocated (simplification of administration and processing).

The recreation of living space is not subsidised as part of comprehensive energy renovation. An exception is only possible with detached and semi-detached houses in the course of comprehensive energy renovation and may only amount to a maximum of 25% of the previous living space being recreated and may not result in a new flat.

Please see the information sheet with detailed requirements, prerequisites and recommendations

SMALL-SCALE RENOVATION

Measures which fall into the category "small-scale renovation" are subsidised with a non repayable 15% annuity deposit for a bank loan with a term of 10 years (social housing alternative term of 14 years).

The repayable 50% annuity deposit is cancelled.

- Improvement work and structural maintenance measures are subsidised
- Maximum amounts are determined for the rebuilding of toilets (€3,000.00) and bathrooms (€7,000.00).
- Classic makeover work (sanding of floors, renewing of tiles and paintwork) are not fundable.
- If heat insulation measures are carried out then the following minimum values shall be complied with:

Minimum values with the renovation of individual elements	
Window if replacing the whole unit (frame and pane)	1.35 W/(m ² K)
Window glass (if only replacing the pane)	1.10 W/(m ² K)
External wall	0.25 W/(m ² K)
Top floor ceiling, roof	0.20 W/(m ² K)
Ceiling roof, floor laid directly on soil	0.35 W/(m ² K)

The evidence of sufficient heat insulation shall be provided using the form WBF-6a. This evidence can be omitted if the following minimum insulation strengths are (were) adhered to:

External wall:

composite fibre insulating materials, foam materials 14 cm

Cellar ceiling, walls and floors directly in contact with soil:

composite fibre insulating materials, foam materials 10 cm

Top floor ceiling:

composite fibre insulating materials, foam materials 25 cm

Roof pitch, walls to non-heated attic space:

composite fibre insulating materials, foam materials 25 cm

Exceptions can be granted for valuable buildings.

Renovation/replacement of heating systems:

With the renovation of existing heating systems the use of biogenic fuels is subsidised.

The replacement of old heating systems can be subsidised if condensing boiler technology is used, this shall apply both to gas and oil heating, for reasons of air pollution control or if no district heating grid is available or if there is no storage possibility or if it is economically unreasonable.

Evidence of sufficient heat insulation shall be provided according to the "comprehensive energy renovation" prerequisites.

The integration of solar energy is a subsidy precondition, although exceptions are possible (not economically reasonable or due to location).

Exceptions are only possible with the consent of the State Energy Commissioner.

ECO points:

1 point: when installing building equipment based on renewable energy for heating or hot water production and/or when renovating a heating system

2 points: when installing/renovating at least two systems or a combined system based on renewable energy for heating or hot water production

Please see the information sheet with detailed requirements, prerequisites and recommendations

HOME SUBSIDY

The minimum heating requirements were expanded according to the "Kyoto II Agreement".

Table:

Minimum requirements for home subsidies.

In relation to the sa/vol ratio interpolate values linear.

	Heating requirements <small>total floor area</small> in kW/h (m ² .a)	
	at a sa/vol ratio of ≥ 0.8	at a sa/vol ratio of ≤ 0.2
until the end of 2009	65	35
from 1.1.2010	45	25
from 1.1.2012	36	20

These values are minimum requirements, i.e. no exceptions are possible. A building project is not fundable if these values are not achieved.

Certification by an energy office shall still apply.

A passive house has the following requirement:

Passive house	10 k Wh/(m ² .a) according to OIB
---------------	--

The following alterations and/or requirements shall apply for home subsidies:

- Compulsory use of solar energy (minimum collector surface 5 m²) for hot water production
 Exceptions:
 - if economically untenable for climate reasons
 - if district heat supply is guaranteed all year round
 - if a heat pump heating system is in use with an annual work total of at least 4, which is operated all year round and a 1.5 KW photovoltaic unit is also installed.
- Calculation of heating requirement according to the sa/vol ratio related to 3,400 heating degree days in accordance with the table
- Heating system with renewable energy
 Exceptions:
 - if an Energy Commissioner statement is available
 - if a wired gas supply which was constructed before 1.1.2006 passes by in the vicinity. Condensing boiler technology is required with gas heating.

New regulation on supplements:

€ 10,000.00 for achieving and/or falling below the 2010 prerequisites

€ 15,000.00 for achieving and/or falling below the 2012 prerequisites

€ 25,000.00 for a passive house

€ 3,000.00 for security precautions (1)

€ 2,000.00 maximum for barrier-free construction (2)

€ 3,000.00 for a klima:aktiv house certificate (3)

- (1) Doors and windows whose fittings show increased burglar-proof protection and/or alarm systems are considered to be preventative measures. This supplement is granted if the entrance doors are equipped as security doors with high-security cylinders and all windows and doors are equipped with resistance class 2 fittings and if alarm systems are fitted. At the same time the systems must be installed by a company recognised by OVE-VSÖ-VVO and the components must have the ÖZS (Austrian Certification Body for Security Technology) certificate.
- (2) The supplement is granted if obstacle free, barrier-free living (cooking, eating, living, sleeping, sanitary facilities) is possible if necessary on one level. Access to the ground floor must be reachable without any steps (with locations on a slope at least from the car parking space to the front door). The bathroom and toilet must be barrier-free on the ground floor (or simple retrofitting adaptation must be possible in accordance with information sheet 02 - Adaptable Living).
- (3) klima:aktiv house is an Austrian Ministry of Environment initiative. House builders and klima:aktiv house partners must adhere to precisely defined prerequisites to guarantee the qualities required in the catalogue of criteria and to acquire the klima:aktiv house certificate. www.klimaaktivhaus.at

Alternative energy supplements:

- | | |
|--|-----------------|
| • Solar energy system for hot water production (at least 5 m ² collector surface) or partial solar heating (at least 15 m ² collector surface) | max. € 7,000.00 |
| • Photovoltaic units of at least 1.5 KW | max. € 7,000.00 |
| • Biomass heating | max. € 7,000.00 |
| • Heat pump heating (annual work total at least 4; only in combination with solar and photovoltaic) | max. € 5,000.00 |
| • District heating connection | max. € 3,000.00 |

The multi-storey building technical regulations for heat pumps and controlled ventilation systems shall be applied accordingly for homes; the necessary electrical resistance, additional heating elements required for this (e.g. electrical cartridges, supplementary heating register) may not be over 2 KW electrical power input in total.

With homes in groups it is a subsidy precondition for homes built onto each other that the separation of the individual buildings must be from the top edge of the foundation plate over the entire height of the building. With corresponding designs this can be through to the roof; however it must comply with fire protection requirements (REI 60). The minimum air-borne sound protection shall be greater than 60 dB in accordance with the Austrian standard ÖNORM B 8115 – 2.

Please see the information sheet with detailed requirements, prerequisites and recommendations.