



# My Renovation schedule



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#### YourRenovation Schedule

Dear Mr Feigel,

Enclosed you will find your personal renovation schedule for your residential building in Berlin.

The remedial measures mentioned are listed one after the other for your information. The first three packages of measures show the quickest results, the following packages of measures contain additional measures for information.

It is best to combine the suggested efficiency measures with upcoming modernization and maintenance work in order to save costs. In this way, the condition of your house is improved with each renovation package, so that at the end of the schedule a good, future-proof energy standard is achieved. In addition to the value-enhancing component for your property, the following measures significantly increase the quality of living, the comfort and the coziness in your building.

If you have any further questions about the individual points, please do not hesitate to contact us.

I wish you much success and a pleasant living!

Henk Wenner

Report created on July 12, 2024

# Your house today ÿ inventory

During the on-site analysis of the building, the special structural initial conditions presented here were found.









Building data	
Location	Berlin
Building type	Apartment building
Construction year	1910
Living space	approx. 2,306 m <sup>2</sup>
Full floors 5	
basement, cellar	yes / unheated
Roof	heated
Construction year Heating	1995 – Gas-fired central heating
Previous	from 1990 window replacement
Renovations	from 1990 roof extension
Renewable	
Energies	









# Your house today ÿ current energetic state

#### Overview of the current energy status and renovation needs of your house





# Your house today ÿ description and explanation

#### How to understand the graphics

For clarity, individual building and system components are assigned to different components in the renovation schedule. These each play a significant role in the overall energy quality of the building. Each component is represented by a characteristic pictogram, which can be found throughout the entire document.

The energy evaluation of the individual components is based on the calculated energy values and is shown in color.

In the middle you will find the overall energy rating for your house today. The pictograms are used to evaluate the building envelope (roof, windows, walls, floor) and the system technology (heating, hot water, heat distribution, ventilation).

During the renovation, the pictograms show the expected energy status after successful renovation.

#### Individual starting situation for your renovation

The residential building in Berlin is in good condition.

As part of the individual renovation plan, weak points in the building envelope and the system technology are to be identified and improved through energy-saving renovation measures.

A complete renovation to a KfW Efficiency House 85 EE is not economical in many cases due to the currently high construction costs. With the measures described, you will achieve the GEG standard currently required for new buildings, which represents a very high energy rating. If you still want to achieve an efficiency house, you can achieve this at the end of all the packages of measures in this roadmap. However, the KfW loan will probably not be sufficient and you will probably need additional financing.

# Your restructuring plan

On the opposite side is the heart of the iSFP, the timetable page.

Here you will find a long-term overview of the energy status of your building and the Renovation measures to be implemented. Starting with the current state and ending with the target state after Implementation of all packages of measures. The energy status is determined based on the primary energy demand and shown in color. Dark green corresponds to the highest efficiency level, dark red the lowest. In addition, the investment costs and the Funding for the individual packages of measures. Information on energy costs, CO - Emissions and expected final energy consumption are only shown for the current and target states. The timeline shows the implementation date agreed with you individually for the respective

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The timeline shows the implementation date agreed with you individually for the respective package of measures. Detailed information on the individual measures can be found in the implementation assistance.

Classification of the overall energy rating of the house on the colour scale

q <b>[</b> th kWh/(m²a)	Description
ÿ 30	Advanced standard
ÿ 60	Legal requirements for new buildings as of 2020
ÿ 90	Legal requirements for new buildings as of 2002/2009
ÿ 130	Partially renovated building
ÿ 180	Partially renovated or unrenovated building
ÿ 230	Partially renovated or unrenovated building
> 230	Partially renovated or unrenovated building

#### Primary energy demand

The primary energy requirement takes into account not only the final energy requirement of the building but also the Energy consumption for the upstream process chains outside the building. These include the Extraction, processing, conversion and distribution of the fuels used.

#### (expected) final energy consumption

The expected final energy consumption is based on a comparison with the calculated final energy requirement (energy quantity for heating, hot water, ventilation), the individual user behaviour and Climate factors. If no consumption data is available for comparison, the expected final energy consumption is determined using a typical consumption factor.

#### **Anyway costs**

In the iSFP, the costs that would be incurred anyway for necessary repairs as well as costs for other modernization measures (e.g. comfort improvements).

#### Energy sources and energy prices

Depending on the system concept, different energy sources can be used for heating, hot water and ventilation in your house. Below you can see the energy sources used with

Your current energy prices or current energy prices used to calculate the Energy costs were used as a basis.

Energy sources	Auxiliary current	Natural gas E	Energy source 2	Energy sources 3
Base price today (gross)	145,00 €/year	185,00 €/year	-	-
Labor price today (gross)*	26.00 cents/kWh 8.00 c	ents/kWh	-	-

The labor price refers to the calorific value.



The investment costs stated are based on a cost estimate at the time the renovation schedule was drawn up. This is not a cost estimate according to DIN 276. There may be deviations from the actual implementation costs. Specific offers from specialist companies must be obtained before implementation.

The funding amounts were calculated based on the conditions of the funding programs in force at the time the iSFP was created and are purely informative. There is no entitlement to the stated funding amount.

Funding opportunities may be higher or lower at the time of implementation, so please check again at the time of implementation.

The energy costs were calculated using today's energy prices and the expected final energy consumption after implementation of the respective package of measures. Energy prices can fluctuate in the long term.

#### Your house in the future – these are your advantages

The decision to carry out visual and energy-related renovations has many advantages. You protect yourself against future increases in energy prices and at the same time make a contribution to environmental protection.

Comprehensive renovation measures significantly improve thermal insulation, which leads to greater comfort and energy savings.

In addition to saving energy, greenhouse gases and heating costs, the energy renovation of your home also brings other benefits. The improvements that the renovation plan provides for your home are summarized here:



Thermal comfort: free from unpleasant draughts, heat or cold radiation. Uncomfortable draughts are prevented by tighter doors and windows. Insulating walls and roofs also increases comfort considerably.



**Summer heat protection: Protection against overheating in summer** Shading for roof and facade windows is the most important protection against overheating. Insulating the roof and facade also improves heat protection.



**Soundproofing:** free from noise and sounds from the environment Tight doors and windows generally increase soundproofing. Insulating materials also contribute to better soundproofing.



**Healthy living: free from moisture, mold and fungus indoors.** Insulated, warm components and secure ventilation ensure a healthy indoor climate without mold.



**Property value: Increasing the market value of the building** The utility value of a renovated building can easily keep up with newly constructed buildings. This also increases the market value of the building.



Security: Protection against burglary and theft When

new doors and windows are installed, a higher resistance class can be selected, thus increasing burglary protection.



**Architectural quality: Designing the external appearance of your building** The renovation gives you the opportunity to design your house according to your wishes, for example the colors of the roof and facade or the door and window design.



Accessibility: Ease of use of the building for everyone During renovation, you can remove obstacles in and to the house, making it easier for everyone, from strollers to the elderly.

# Your house in the future – energetic target state

#### Overview of the target energy status of your building after renovation





### **Cost presentation**

The costs of energy-saving renovation are a key question when deciding on a Energy efficiency measures on buildings have a major impact on

The advantage is that they regularly reduce heating costs. Here, for each package of measures, the approximate costs of the renovation. In addition to the investment costs of the package of measures the proportional costs and possible funding are considered according to the current status.

In addition, you will be shown the consumption-adjusted energy costs in the current state and after Implementation of the respective packages of measures. Based on the energy costs that Implementation of the packages of measures are expected, you can see the effect of the energetic These savings are offset by the costs associated with the Renovation measures are involved.

Pack	ages of measures	Investment costs¹ €	of that Anyway- Cost €	Funding² €	Energy- Costs³ €/year
It's or	n				13,800
1	<ul> <li>Insulation of the bay balcony</li> <li>Insulation of the exterior wall</li> <li>Insulation of the bay window floor</li> </ul>	309,000	199,000	61,800	12,650
2	<ul><li>Replacing the front door</li><li>Replacement &amp; renewal of windows</li></ul>	201,000	57,000	40,200	11,450
3	Insulation of the basement ceiling	52,000	0	10,400	10,350
4	<ul><li>Replacing the heating</li><li>Replacement of hot water preparation</li></ul>	77,000	82,000	23,100	13,650
5	<ul> <li>Insulation of the roof</li> <li>Insulation of the dormer</li> <li>Installation of a ventilation system</li> </ul>	787,000	212,000	136,800	11,050

The energy costs are reduced by approx. 1,000 €/year thanks to the revenue from the PV system.

In the future, it can be assumed that energy costs will increase due to price increases for energy sources and political measures will continue to increase. Then you will save even higher energy costs.

- 1 The investment costs stated are based on a cost estimate at the time the rehabilitation plan was drawn up. This is not a cost estimate according to DIN 276. The actual execution costs may vary aureten. Before execution, specific offers must be obtained from specialist companies.
- 2 The funding amounts were calculated based on the conditions of the funding programs in force at the time the iSFP was prepared and are purely informative. There is no entitlement to the stated funding amount. Funding opportunities may be available at the time of implementation. higher or lower, so please check again at the time of implementation.
- 3 The energy costs were calculated using today's energy prices and the expected final energy consumption after implementation of the respective package of measures. In the long term, energy prices can fluctuate.

#### Your next steps

#### How to start your renovation

- Prepare the individual renovation steps well on the basis of your renovation schedule. In the section "Implementation
  aid for your measures" you will find explanations and information on each recommended individual measure.
- Before any renovation work is carried out on existing buildings, a thorough examination of the building structure for
  possible pollutants is essential. The renovation work must be carried out with suitable protective measures to
  protect human health and the environment. During the renovation process, it is essential that the
  pollutants are removed professionally and disposed of in accordance with the applicable environmental and
  occupational health and safety regulations.
- For some measures, you will find a recommendation for a more detailed analysis of a component or even a
  comprehensive building technology analysis. Before carrying out any measures, please contact the appropriate
  specialist planners. We will be happy to advise you.
- In order to apply for BAfA funding, it is essential to involve a listed energy efficiency expert. We would be happy to support you in applying for funding.
- In order to receive federal funding for one of the renovation measures mentioned, it is necessary to submit an
  application to the BAfA before the construction project begins. Furthermore, the investment costs must be greater
  than €2,000, and greater than €300 for the individual heating optimization measure.
- We recommend that you monitor your energy consumption after the renovation. If you know your own consumption habits, you know what energy is being used for and thus create the conditions for new energy-saving successes.

#### Involvement of additional planners and experts

This renovation schedule is the result of the energy consultation and does not replace any implementation planning. Before construction work to implement the measures begins, you should have the components checked for damage and usability. For this purpose, I recommend that you involve from:

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	Architect, planning renovation measures
	Structural engineer, checking roof structure for load-bearing capacity for solar system
	Chimney sweep, chimney inspection
	Wood protection expert, inspection of roof trusses and wooden beam ceilings
	Specialist planner building services, planning ventilation system
	Energy expert, ventilation concept



More information at: www.energiewechsel.de Hotline 0800-0115 000

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