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TECHNICAL ASSET MANAGEMENT

5 ways to increase your property's value while profiting from subsidies

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Renovation or refurbishment measures can enhance the value of a building and make it more attractive for potential buyers or tenants. However, it is not always easy to decide which measures for upgrading a property should be considered. It also depends on the type of property – what works for a huge office complex might not necessarily be the best solution for a smaller apartment building.

Clever calculation is required to ensure that the benefits exceed the costs. We look at several options to increase a property's value, always with an eye on the latest legal developments – and carefully evaluate them, taking into account the newest subsidies.

1

Photovoltaic systems can be used in a variety of ways and for different types of property to save energy. The EEG-2021 brings new advantages to PV owners.

Solar power systems can add value to properties because they have a direct impact on ancillary costs. There are currently many subsidy options for such systems. Most importantly, the Renewable Energy Law (EEG) has been updated at the beginning of 2021.

Property owners who already have a PV system profit from the new regulations: If their system does not exceed an output of 30 kilowatt peak (kWp) and they have a maximum annual solar self-consumption of 30 megawatt hours (MWh), they are exempt from the EEG levy for the self-consumed solar electricity, which means they save 6.5 cents per kilowatt hour (kWh).

"Yet it would be too simple here to look only at the acquisition costs only, which amount to 2,000 to 3,000 Euros per kWp, and the savings. There is much more at stake here, and it can become a win-win situation for landlords and tenants alike", explains Matthias Kiparski, Technical Asset Manager at TA Europe: **"By selling the electricity to the tenant, the tenant saves on ancillary costs. The same applies if the energy from the PV system is used to feed the technical facilities, such as ventilation or cooling systems. Through these savings for the tenant, I can get a higher basic rent, which flows directly into the owner's wallet."**

Photovoltaic systems also bring advantages in combination with energy storages. The targeted use of an electricity storage system, fuelled by a PV system, enables sustainable peak shaving, i.e. the capping of expensive load peaks. What does this mean exactly? There are times of the day when a particularly large amount of energy is needed. These so-called peak loads cost a lot of money. On the one hand, the energy supplier has to plan for these times and provide more energy for the maximum loads, which of course has to be paid for in advance. In addition, the grid is more heavily loaded at these times. These peaks are measured by the grid operator and charged to the consumer in the form of higher grid usage fees. However, if these maximum loads are reduced with the help of an electricity storage system fuelled by a PV, significant savings can be achieved.

There are also new regulations here: Previously, only the common areas of the building which produced the electricity, were allowed to consume it. Now, however, the electricity may also be supplied to surrounding houses. Entire neighbourhoods, and no longer just the individual house, are to benefit from tenant electricity. This way, the Federal Government wants to boost the production and use of solar energy by tenants, and thus the electricity capacities from solar plants are to almost double by 2030. In addition, tenant electricity is also to be exempt from trade tax and network charges.

In addition to these benefits, a photovoltaic system's energy can be used within the building – for lighting, the heating system or even to feed an e-charging station, if the performance is high.

2

When it comes to charging stations for tenant parking spaces, however, the charging pole is more likely to come into focus. When planning e-charging stations in rental facilities, the parking system for electric cars is the solution for your possibly larger complexes recommended to owners and investors.

"Both PV systems as well as e-charging solutions meet the newly defined criteria of the EU's taxonomy regulation" , says Fabian Mack, Associate Director at TA Europe. **"This gives investors a competitive advantage of their portfolio, as these two factors help to classify a building as sustainable. However, this environmental aspect is not the only interesting aspect about such investments. When we are talking about e-charging stations, the social aspect is important, too. It gives employees tax advantages and raises the quality of stay in the building."**

E-charging stations lead to a higher attractiveness of the property and thus to a better lettability of the building.

Charging stations for tenant parking spaces are another smart way to increase a building's value. The planning of e-charging stations in rental facilities increases the value of the buildings for the residents and guarantees a good return for the owner. It is also an investment in the future, relieves the burden on the environment - and is promoted by the state in many ways for precisely this reason.

There are several options to make parking spaces suited for e-charging: The wall-mounted charging station, the so-called wallbox, is the smallest, simplest and most flexible solution. It is suitable for rental complexes as well as for individual garages or car parks.

Indeed, the tax deductibility of hybrid company cars or e-cars is only given if the employer provides a charging station. To date, the "S" criteria of the "ESG" in the EU's taxonomy regulation have not yet been defined – yet it might well be that criteria around employees' satisfaction will be a part of it.

3 Façade insulation and façade greening increase the quality of stay in the building and help to mitigate the effects of heat days and tropical nights.

The energy consumption of a building can be brought down by insulating it properly.

"The focus of the investors or landlords should always be to lower the OPEX costs of the tenant. By doing so, the Net Rental Income can be raised and investors have more outcome", says Matthias Kiparski. **"On the tenant side the focus will be to produce less CO2 and be as sustainable as possible. This can be achieved easily by consuming little amounts of energy."**

This is where comprehensive thermal insulation comes into focus. When planning proper insulation, the entire house should be considered. This includes the windows, the front doors and the façade. Only by creating a uniform standard in the exterior, the complete benefits from effective thermal insulation can be realized.

Green façades bring with them even more advantages: They provide cooling in Summer, improve the air and climate in the house and, as an evergreen variant, offer additional thermal insulation of the outer walls in winter. Green walls also absorb noise and bind pollutants and dust.

A recent study by the German weather forecast (DWD) illustrates how crucial it is to cool down buildings, as heat days have almost doubled, especially in large towns where huge concrete buildings store heat massively. A heat day is a day where temperatures raise to a minimum of 30 degrees Celsius. In the Berlin/Brandenburg area, for example, the number of heat days has increased from 6.5 heat days per year (climate period from 1961-1990) to 11.5 days (climate period from 1990-2019).

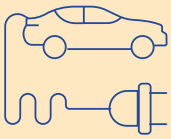
“Heat days are not just causing more inconvenience due to rising temperatures within buildings – they involve massive health risks, especially for senior citizens”, says Fabian Mack. **“In the light of a rapidly ageing population in European countries, the building’s value will be partly tied to how well it is able to regulate the heat within.”**

An alternative which is easier to implement than a full façade greening could be green spaces on roofs. Those absorb solar energy and also serve to cool the building. The establishment of insect cultures such as honey bees on such green areas also contributes to the sustainable use of the land.

More and more building sites are being created and many meadows and grasses are being destroyed as a result. This minimizes a large part of the natural habitat of insect cultures, some of which are even threatened with extinction.

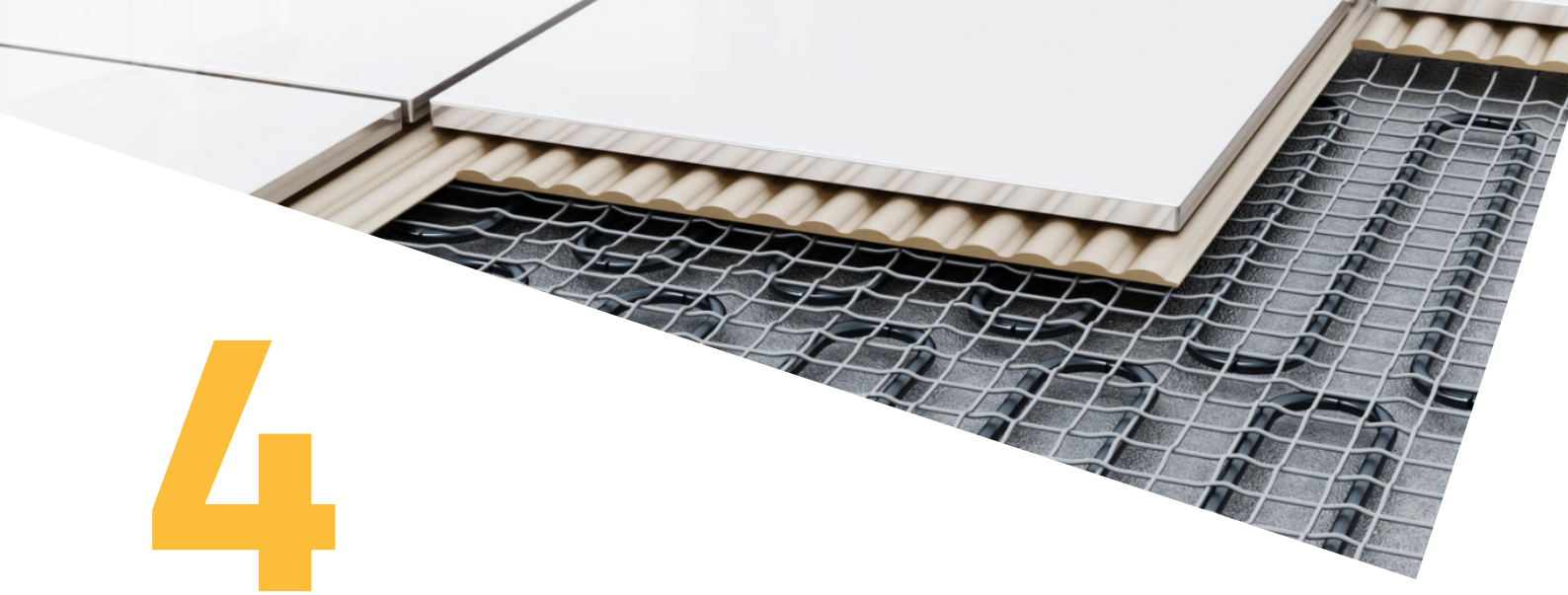
Measures to increase the quality of stay in a building include:

Green roofs



E-charging stations

Façade insulation



4

Exchanging the heating is another smart way to reduce energy costs and increase the building's value. There are potentially high subsidies to profit from.

The costs of gas and heating oil have risen sharply in the last decade. The end of the price spiral has probably not yet been reached as the cost of energy continues to rise. In addition, CO2 charges continue to rise as well. As the German Federal Climate Protection Act set out clear targets to reduce the building sector's emissions, CO2 emissions will be 'charged': A CO2 price deliberately makes fossil fuels more expensive in order to accelerate the switch to renewable energies.

In 2021, the price of CO2 per tonne is €25. Yet it is set by law that this price will rise year by year to €55 per tonne in 2025. For 2026, a price corridor of at least 55 and at most 65 euros will apply. The year 2026 will then be the transition to free trade in pollution certificates. This means that every market participant who sells heating oil or natural gas, for example, will then have to buy such certificates at auction. The pollution rights for CO2 emissions will become scarcer in order to reach the target of 70 million tonnes of CO2 emissions for the building sector in 2030. The fewer CO2 certificates that can be traded, the higher the CO2 price will rise.

A simple way to reduce energy costs and to increase the building's value already now is therefore to exchange the heating system.

"Heating systems such as a heat pump, pellet heating or solar thermal system are climate-friendly alternatives to the fossil fuels oil and gas, and they are becoming increasingly popular both in new buildings and when it comes to renovations of existing buildings. There are also so-called hydride heating systems if you do not want to switch completely to renewable systems", explains Fabian Mack.

Looking closely at heating systems and their respective subsidies can pay off – as of 1 January 2021, the attractiveness of these programs has increased and up to 50% of the costs for a new heating system can be funded.

Pollution certificates will lead to higher CO2 prices

5

Implementing a control technology for ventilation and cooling can be complex – but can lead to relevant energy savings

State-of-the-art ventilation technologies are indispensable in low-energy houses. Modern building materials insulate buildings so efficiently that pollutants and moisture can no longer escape on their own. Insufficient ventilation can result in damp rooms or even mould. By regulating the indoor climate, the fabric of the building can be preserved. At the same time, the value of the property increases.

"There is a so-called Demand-Controlled-Ventilation-system, which measures various key values such as CO2-concentration, number of people or room temperature and regulates the air volume flow itself", explains Matthias Kiparski. **"The energy savings through on-demand ventilation consist on the one hand of the savings in air treatment and on the other hand of the smaller fan work. The bigger proportion, also in relation to operating costs, is the energy expenditure for air transport. A decentralized one is energetically optimal RLT solution in which a ventilation device supplies a room, e.g. con-ference room or office with façade ventilation device."**

Appendix: Subsidies – What to bear in mind

The newest development brought an end to funding via loans from the 'Kreditanstalt für Wiederaufbau' (KfW) for measures which used to be quite popular: the new construction and the refurbishment of KfW-55 and KfW-40 buildings. While requests handed in until 24 January 2022 are still being processed, the future of such fundings is still not defined clearly. However, the Federal Promotion for Efficient Buildings (BEG), Germany's energy-related building promotion, which had been restructured a year ago, is still in place. This means there are federal funds for improving the energy efficiency of a building that can be used by investors and owners to reduce CO2 emissions. Some key facts to consider:

- The application for funding must be submitted **before** the measure has been implemented. It is not possible to request subsidies when the renovation measures have already begun.
- It might take 9-12 weeks before the authorities approve the funding.
- Previously, there had been two possible ways to receive subsidies – via the Kreditanstalt für Wiederaufbau (KfW) and the Federal Office of Economics and Export Control (BAFA). Now there is only the option to receive funding via a cash grant by the BAFA: Cash grants via the Federal Office of Economics and Export Control (BAFA) are paid out after completion, but have to be requested before starting the measures...
- To receive the subsidies, an energy efficiency expert must be consulted for almost all renovation measures. This expert requires certification according to DENA. Contact us via **info@taeurope.com** to get help with choosing a suitable expert.
- If you want to renew your heating system, you don't need an energy efficiency expert. A specialist planner for heating is sufficient in this case.

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