

## »» Housing with improved accessibility: ageing is a strong driver of demand – support is working

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Homes need to be made more accessible so that residents can live independently and safely as they age or develop mobility limitations. Demographic change is driving the need for accessible housing. Today Germany has some 3 million households with mobility impairments and that number will grow to 3.7 million in 2035.

However, according to our first representative estimate, only 560,000 homes are accessible today. In order to reduce the enormous deficit in spite of market barriers, KfW is providing investment incentives to improve the accessibility of existing homes under its 'Age-Appropriate Conversion' programme. In the years 2014–2018, promotional loans and investment grants were used for the conversion of a total of 190,000 homes.

These are the findings of an evaluation commissioned by KfW Research and the German Federal Ministry of the Interior, Building and Community. The evaluation also found the support to be effective. By far the largest number of measures implemented were those that are crucial to accident prevention and independent living – eliminating steps and building age-appropriate bathrooms. The primary, mobility-limited target group was also reached very well, mainly because the grant support provided is suitable for elderly households.

The support will become more important in the future. Apart from growing poverty rates among the elderly, the coronavirus pandemic is causing significant income losses. At the same time, the experience of home isolation is likely to raise awareness of the importance of age-appropriate housing.

The baby boomer cohorts born in the 1960s are approaching retirement age. The number of seniors over the age of 64 will therefore grow rapidly in the next 10 to 15 years from approximately 18 million to some 23 million in the year 2035. The need for age-appropriate housing is rising fast as a result of demographic change. In order to ensure independent and safe living in old age or with limited mobility, barriers need to be reduced, for example through the removal of steps and the conversion of bathrooms. KfW and the German Federal Government have been providing investment incentives for the necessary modifications to existing homes under the 'Age-Appropriate Conversion' programme since 2009.

This paper summarises the key results of a comprehensive evaluation carried out by the German Institute for Housing and Environment (IWU) on the programme years of 2014–2018.<sup>1</sup>

### Three million households need accessible housing and the trend is rising

The main target group for accessible housing is composed of households with residents who have impaired mobility due to old age or other reasons. At the end of the year 2018, Germany had about 3 million households with mobility-limited residents. This target group is composed roughly 90% of senior households and 45% of households with residents requiring care.

Accessibility problems in the home not only make day-to-day life harder for this key target group but also represent a serious health hazard. In-home accidents often lead to serious injuries, incapacitation and even death. The accident statistics are a worrying reflection of the ageing of the population. The number of deaths caused by in-home accidents has grown by 70% within ten years. In the year 2017, some 14,600 persons died from accidents in their homes and most were over the age of 74.

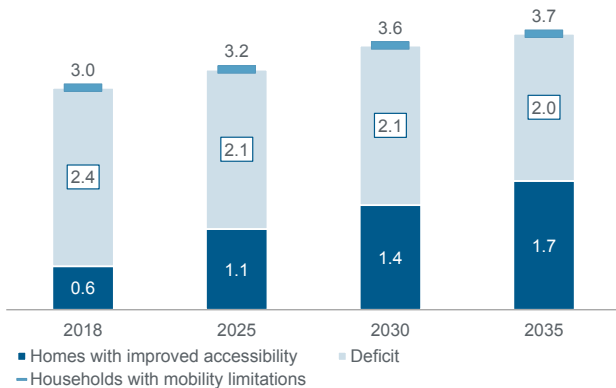
### Germany has only 560,000 age-appropriate homes

For the first time, the evaluation comprised a representative estimate of the number of homes with improved accessibility on the basis of the 2018 Microcensus. Of the country's 37 million homes (including detached houses), 560,000 or just 1.5% have improved accessibility according to the criteria applied in the evaluation, which reflect the needs of residents with mobility limitations. Fundamentally, this includes the absence of thresholds or steps, unimpeded movement and a walk-in shower.<sup>2</sup>

The discrepancy between demand and availability means a deficit of 2.4 million age-appropriate homes (Figure 1). How this deficit will evolve in the future depends on the trajectory of target group demographics on the demand side and on construction and conversion activity on the supply side. The ageing and singularisation of society is creating a trend towards a growing number of smaller households – despite the fact that the overall population is declining. The target group of households with mobility-impaired residents is in the highest age bracket. Accordingly, their number will increase by around 25% to 3.7 million by the year 2035.

**Figure 1: More than 2 million dwellings are needed**

Projection of the supply of homes with improved accessibility, households with mobility limitations and the resulting deficit (in millions).



Source: IWU (2020).

**Positive developments in construction and conversion**

On the supply side of the housing market, new buildings are highlighting the increased political importance of age equality. Growing statutory accessibility requirements for multi-family houses are leading to a rise in new buildings with improved accessibility. By 2035, approximately 52,000 new age-appropriate dwellings can be expected to be built on average each year, 80% of which in multi-family houses and 20% in detached houses. Conversions of existing dwellings are also predicted to increase, with some 12,500 homes with improved accessibility to be added each year on average over the forecast horizon. On that basis, around 1.7 million age-appropriate homes are being projected for the year 2035. Given that 3.7 million households have mobility limitations, the deficit in 2035 will remain at around 2 million dwellings.

The additional need for age-appropriate homes is actually even greater than this considerable deficit. The reason is that supply and demand are far from being perfectly balanced. For example, just 4% of the 1.3 million households in need of care currently live in an accessible dwelling. Age-appropriate conversion is therefore particularly relevant because it can often meet the specific needs of the dwellers in a more targeted manner than a new building.

**Market barriers are hampering conversion investments**

The deficit is not least the result of structural impediments that prevent an efficient market result. Generally, there are financial limitations. The need for age-appropriate housing is independent of income and assets but not all households possess the funds required to carry out necessary conversion measures. Moreover, they have limited access to credit depending on their age and financial situation. In addition, lack of information about the benefits, options and costs of improving accessibility act as an investment barrier. This is particularly the case in middle age, when homeowners typically purchase (and modernise) their homes and few consider the advantages of improved accessibility.

Low investment incentives for rented homes are another market barrier. Landlords often shy away from investing in

measures that improve accessibility because of long amortisation periods, since accessibility features hardly increase the achievable rent. The incentive problem is currently aggravated by excess demand in many parts of the housing market. Tenants cannot always be sure that they can remain in the dwelling long-term and face the challenge of negotiating a conversion with the landlord and possibly being required to bear additional costs of returning the dwelling to its pre-tenancy condition.

**Investment incentives through the promotional programme**

Given these market barriers, additional investment incentives are necessary to reduce the substantial deficit. For this reason the “Age-Appropriate Conversion” programme was introduced in 2009 (on behalf of and with financing from the German Federal Government). It provides funds in the form of reduced-interest loans and investment grants for making the interior of the dwelling and the entrance more accessible. All actors of the housing market are eligible to apply: private owner-occupiers, tenants and homeowners’ associations, as well as commercial landlords and housing companies.

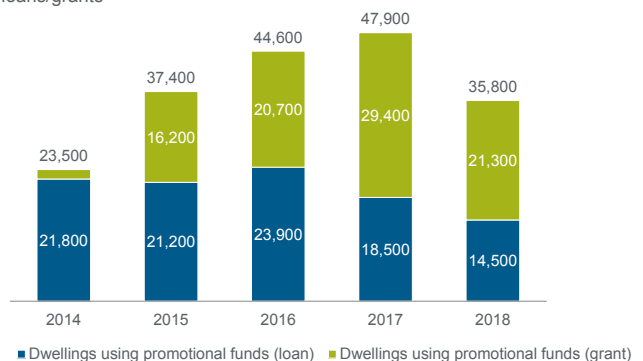
The investment grant is exclusively directed at private households to complement promotional loans in order to provide even stronger incentives, especially for smaller measures, elderly residents and/or households with limited financial resources.<sup>3</sup> Funds are provided irrespective of age or a specific health-related requirement, thus enabling forward-looking preventive conversions in particular but also improvements to living comfort for families with small children.

**190,000 converted dwellings in five years**

During the period of 2014 to 2018, approx. 99,000 loans and grants were requested for measures designed to improve accessibility. A total of around 189,000 housing units were converted with a promotional volume of EUR 1.8 billion. The converted housing units were financed in roughly equal proportions with loans (100,000) and investment grants (89,000) (Figure 2). One third of all financed dwellings (61,000) were converted with loans requested by commercial landlords (housing companies, cooperatives).

**Figure 2: 38,000 age-appropriate dwellings per year**

Dwellings that underwent age-appropriate conversions in total and with loans/grants



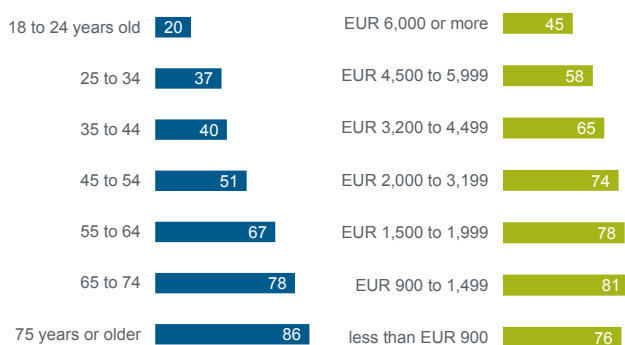
Source: KfW / IWU (2020).

### Loans and grants address market barriers

These financial figures indicate that the promotional programme is effectively addressing the market barriers. Providing a choice of loans and grants appears to accommodate the diverse needs and financial possibilities. Grants are more likely to be requested by older applicants and those with lower income (Figure 3). Grants are used primarily to specifically carry out necessary and financially viable individual measures. Loans tend to be applied for more complex and costly conversion measures.

**Figure 3: The older the target group, the more important the grant is as a promotional instrument**

Percentage of grant recipients in supported private households by age and net household income



Source: IWU (2020).

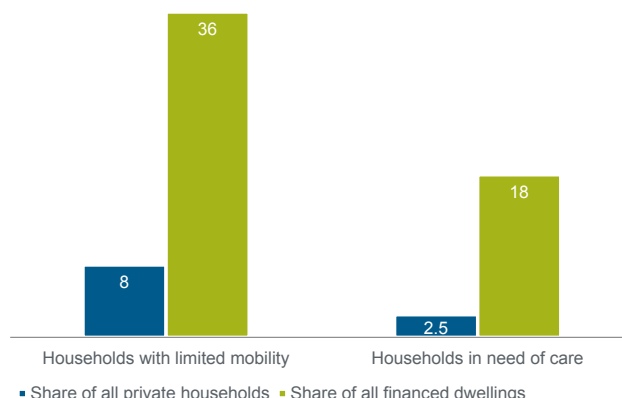
Around 60% of financed dwellings (including detached houses) were converted by owner-occupiers while 40% were rented dwellings. As was expected in light of the market barriers, the latter are underrepresented in the promotional programme. In Germany, 54% of households are tenants. It is apparent that the fundamental incentive problems for tenants can rarely be overcome with investment promotion. Only 1% of the financed dwellings were converted by tenants. By contrast, the promotional programme reached private and commercial landlords more effectively, as each group converted around 20% of all financed dwellings.

### Key target groups with specific needs were reached

Households with mobility limitations represented 36% of owner-occupiers reached by the promotional programme. Their share in the population is around 8%, which means that the key target group is overrepresented fourfold among the recipients of the support. Elderly people who require care are in particular need of age-appropriate housing. These households therefore request financing particularly often, as 2.5% of households in Germany require care and their share of 18% among the recipients is more than seven times as high.<sup>4</sup> The investment grant is the main reason the promotional programme has reached the target group so effectively. That is because the key target group consists primarily of elderly households for whom a grant is more appropriate.

**Figure 4: One in three financed households have limited mobility**

Share of key target groups in financed private households and in all households in Germany



Source: IWU (2020).

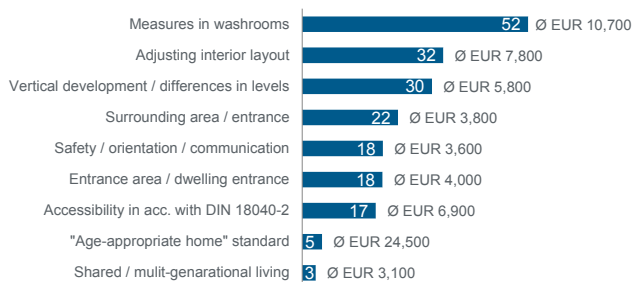
When the promotional programme was introduced, KfW and the Federal Government pursued the objective of setting meaningful and practicable standards for improving accessibility of existing dwellings for the first time – and raising awareness of the need among the population. The large number of beneficiaries (approx. 12,000) interviewed for the evaluation confirmed this role, as 30% only became aware of the issue through KfW and 40% learned about specific measures for the first time. The vast majority of beneficiaries believe the information on the available support is easy to find (71%) and sufficient (78%). Seniors, who make up more than half the financed private households, gave the information being offered particularly high scores. Cross-references in the information from KfW and the option of combining various support programmes create additional incentives. One in four age-appropriate conversions are carried out in the context of other, usually more extensive, renovation work.

### The support is working: effective accident prevention and independent living

The funds are primarily used to pay for conversions of sanitary facilities, for example for walk-in showers. Modifications of washrooms were carried out in more than two thirds of the dwellings converted under the promotional programme (68%, Figure 5). The cost of these measures averaged EUR 10,700. Other frequent measures include levelling floors or removing steps (28%) altering room geometry (25%) and removing entrance barriers (23%). These types of measures are also regarded by the research literature as crucial for residents to be able to live independently despite physical limitations and for reducing the likelihood of accidents to a statistically significant degree. The most effective measures are thus by far the ones most frequently financed under the programme.

### Figure 5: Bathrooms are the top priority

Financed housing units by areas of support (in per cent) and average cost per measure. Extrapolated on the basis of the customer survey (sample of approx. 11%).



Guide: Washrooms were converted in 52% of all financed dwellings. The average cost of washroom conversion was EUR 10,700.

Source: IWU (2020).

### Deferring nursing home care saves EUR 110 million a year

The vast majority of beneficiaries prefer in-home care by family caregivers or a home care service (71%) over nursing home care (28%) if they require care at a later stage. For many, this preference is the key motive for age-appropriate conversion. Here, too, the promotion is effective. The most commonly undertaken conversion of washrooms and elimination of steps within the home are also crucial for residents to be able to receive home care as long as possible.

But avoiding nursing home care not only improves the care recipients' quality of life, it also enables considerable cost savings. Nursing home care is much more expensive than receiving a long-term care allowance and benefits in kind for in-home care (approx. EUR 39,000 as opposed to EUR 15,000 per year). The annual savings of around EUR 24,000 per care recipient breaks down 60/40 between the state (long-term care insurance and tax budget) and the affected private households (co-payments to the care home). Overall, the estimated annual savings enabled by the promoted conversion measures amount to roughly EUR 110 million per year, or EUR 550 million in the evaluation period 2014–2018.

### Investments of EUR 5.9 billion led to 89,000 jobs

The Age-Appropriate Conversion programme led to construction investments totalling EUR 5.9 billion between 2014 and 2018. This investment generated some EUR 4.8 billion in additional value added, which in turn secured or created 89,000 full-time jobs (annual average of around 18,000). For each EUR 1 million invested, around 15 jobs were secured or newly created through measures to improve accessibility.

These economic effects<sup>5</sup> of the promotion have increased public revenue through wage taxes, social security contributions, turnover taxes and taxes on company profits by EUR 2.6 billion (from a promotional volume of EUR 1.8 billion).

### Evaluation: the promotional programme is necessary and effective

In conclusion, the evaluation yielded two results: first, that the promotional programme is necessary in order to provide additional investment incentives given the large deficit of more than 2 million dwellings and persistent market barriers. Second, the two-pronged promotional approach of loans and grants in particular means that it is appropriately designed in that it reaches the key target group of households with mobility limitations and enables conversion measures that are effective in facilitating independent living, preventing home accidents and improving overall quality of life. Against this backdrop, the long-term continuation of the promotional programme is regarded as necessary and an extension is considered to be generally beneficial.

In the future, the ratio of households' needs to their financial means is expected to shift unfavourably. For one thing, the rapid ageing of the population is creating greater needs and, for another, the very likely increase in old-age poverty will cause the financial resources of key target groups to dwindle. This will no doubt increase the relevance of promoting age-appropriate conversion measures.

### Coronavirus: a growing need amid financial constraints

The coronavirus pandemic will cause a substantial loss of income and assets for many households. At the same time, home isolation and the experience of restrictions on public life are likely to make many elderly or mobility-limited people keenly aware of the importance of accessible dwellings for independent living. This has the potential to significantly increase demand for accessible housing (beyond the demographic effect). Given the emerging economic disruption, low-income households may need even more support for age-appropriate conversion than before, for example in the form of higher grant amounts or the introduction of a repayment bonus in the loan programme.

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<sup>1</sup> IWU (2020), *Evaluation des KfW-Förderprogramms "Altersgerecht Umbauen (Barrierereduzierung – Einbruchschutz)"* (Evaluation of the KfW promotional programme 'Age-Appropriate Conversion – Burglary Protection' – our title translation, in German only), Darmstadt. The study was undertaken on behalf of KfW Research and the German Federal Ministry of the Interior, Building and Community.

<sup>2</sup> The specific criteria for entry to the dwelling: step-free access and a sufficiently wide entrance door and corridor. No thresholds, steps or uneven surfaces inside the dwelling, internal doors and corridors are sufficiently wide, the kitchen facilitates unimpeded movement, as does the bathroom which additionally has a walk-in shower. Significantly more dwellings meet the entry access criteria (3.8 million or 9% of all homes) than the more comprehensive interior space criteria (0.9 million or 2%).

<sup>3</sup> In the years 2014 to 2018, the Federal Government made promotional funds totalling EUR 286 million available for the investment grant.

<sup>4</sup> The target group can be assumed to have been reached with similar effectiveness for private landlords (20% of the financed dwellings) as for owner-occupiers (60% of dwellings) because conversions here are often at the tenant's request. Target group reach can be expected to have been less effective for commercial landlords because the conversion here is less often needs-driven.

<sup>5</sup> The overall economic and fiscal effects were calculated on the basis of a static input-output model.