PlanRadar

Homes of the Future

Findings from PlanRadar's research into Buildings of the Future

Ebook

Executive Summary

Like so many parts of society, the COVID-19 pandemic has had a profound impact on our idea of the home. From one day to the next, billions of people began using their homes as a workplace – rather than exclusively for relaxing, sleeping and eating.

For generations, work was something that happened away from home, so the readjustment was a shock for many. Nevertheless, prior to the industrial revolution, a very large proportion of economic activity did take place at home. It was only the emergence of large, specialised machines which meant work needed to be conducted in factories and, later, in offices.

This example speaks to the fact that our notions of what homes are, what people do in them, and how they are organised is continually changing. Influenced by government policy, consumer trends, economic forces, technological innovations and cultural shifts, the meaning and purpose of homes is constantly in flux.

In this eBook, we explore the findings of PlanRadar's research into Buildings of the Future. By exploring national policies, architectural priorities and housing trends in 12 countries, we hope to draw a picture of how homes are changing at a critical juncture in history. This eBook is intended to inform architects, housing policy makers, interior designers and other housing professionals about global trends and what they mean.

Should you have any queries about the research or its findings, do not hesitate to contact PlanRadar for more information.

Key findings at a glance

58% of countries see 'hybrid' homes, where work happens, as a key trend for future design

Going green three fifths of interior designers see biophilia as a key trend, two fifths expect more nature-based colours, and a quarter believe 'eco-chic' is in vogue

#1 the à la mode French express interest in the widest range of interior design trends

66% of countries expect more recycled and sustainable furniture

3m² the UAE has the smallest legal habitable bedroom size

92% of countries believe advanced lighting systems are here to stay

91% of Hungarians own their own homes, making it the top nation of homeowners

50.5% of Germans live in households that own their homes – the lowest proportion in the EU

70% of UAE citizens rent rather than own – the lowest proportion worldwide

French fusion French designers show a unique taste for 'Japandi' – combining Japanese and Scandinavian style

How do experts think the home will change?

Global real estate is, arguably, the biggest industry in the world. It employs tens of millions of people[1], contributes significantly to annual GDP figures, and represents by far the greatest store of value in the world economy.[2] On the individual level, people's housing costs absorb around 20% of their monthly income, according to data from the OECD, making homes most people's biggest single outgoing.[3]

Housing is important not just for economic reasons. With the world population expected to reach 8.5 billion in 2030, and 9.7 billion in 2050, providing quality homes that people wish to live in - in a sustainable manner - is one of the greatest challenges facing global society. What is more, homes are deeply entwined with people's sense of identity, ambitions and belonging. Access to housing (or otherwise) sways elections, leads to protests, and dramatically changes people's life chances.

Understanding how homes are going to change, and what is important to the people who live in them, is therefore vital. For anyone working in the real estate industry – from architects to property developers, to construction firms, interior designers and government policy makers – a clear knowledge of current housing issues and future trends is extremely valuable.

In this eBook, you will learn about a number of these trends. By analysing projections, announcements, policies and whitepapers put forward by experts and authorities on architecture in 12 countries, we build up a picture of the current state of homes around the world, and how they can be expected to evolve in the coming years.

This research is comparative. The goal is to identify both commonalities and differences between countries. We wanted to see which trends are genuinely universal, as well as finding out what is unique to specific countries. By learning about how homes might evolve in different ways in different countries, we can seek inspiration and learn form best practice elsewhere.

[1] https://www.ibisworld.com/global/industry-trends/biggest-industries-by-employment/
[2] https://www.savills.com/impacts/market-trends/the-total-value-of-global-real-estate.htm
[3] https://www.oecd.org/els/family/HC1-2-Housing-costs-over-income.pdf

A Note on the methodology

PlanRadar's team researched 12 countries in which the company is active, across Europe, North America and the Middle East (specifically: the US, UK, Germany, Austria, France, Spain, Italy, Slovakia, Czechia, Hungary, Poland and the UAE). There is a Euro-centric bias in the countries selected, since this is where we have the most resources in terms of languages.

We selected sources based on the following criteria:

1. From a government-led or government-sponsored report, project, or legal requirements.

2. From a report made by the Association or Chamber of Architects within this country (e.g. RIBA in the UK). If there is a professional association of Urban Planners, Civil Engineers, Designers, Interior Designers or Furniture Makers, these are also potential sources for certain relevant questions.

3. Or from articles published within a journal or magazine owned by the Association or Chamber or Architects (e.g. RIBA Journal for the UK). As in 1. above, for certain questions the magazines or journals of other professional bodies are also acceptable sources.

4. Be as recent as possible, but date from no earlier than June 2020, so that we exclude pre-pandemic predictions. Government regulations can pre-date the pandemic, but must still be current. Sources should specifically refer to an individual country, not to global trends.

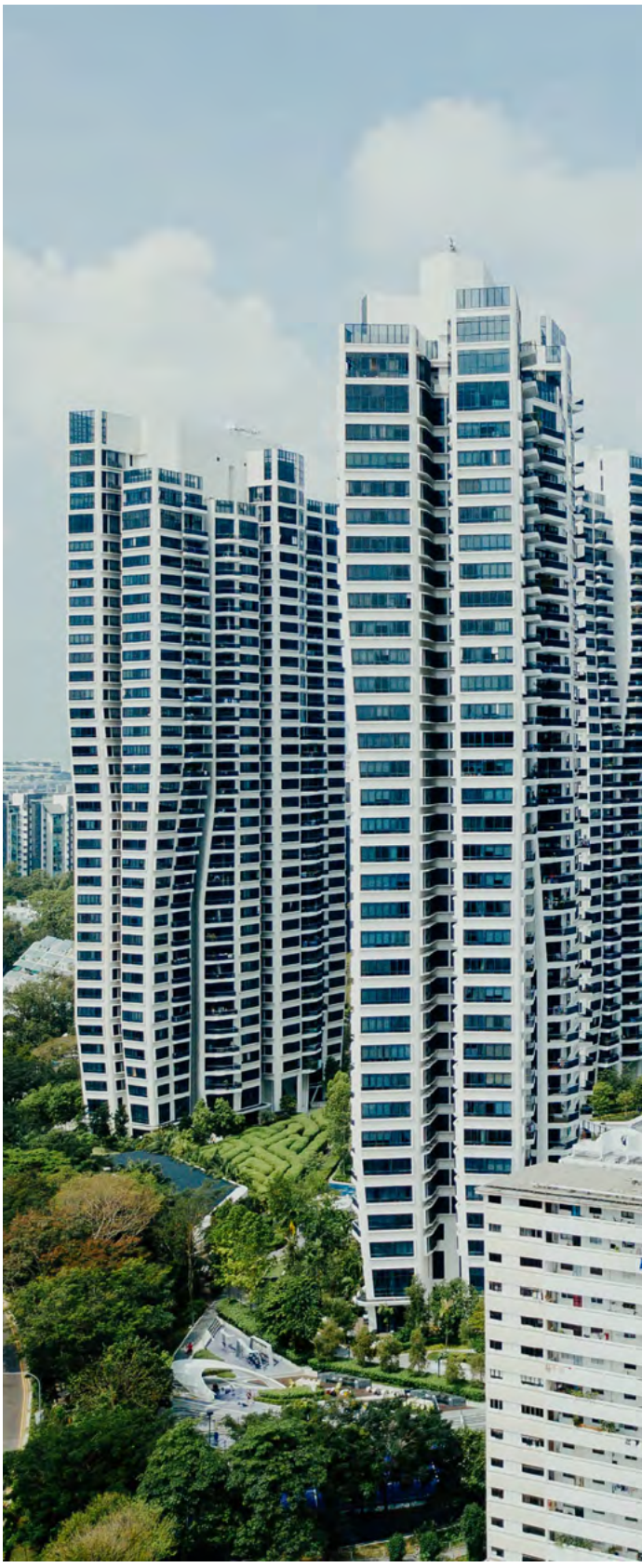
5. Where no answers were available from relevant industry bodies or their publications, other 3rd party sources were used. These occurrences have been clearly marked in the full list of sources.

You can access a full list of sources here.

Insights into the Homes of the Future

What factors will residential property designers need to prepare for when building tomorrow's homes? How will design tastes change, what standards will people expect, how might people's needs evolve?

We have dug into the data to gain a picture of the current state of homes around the world, before analysing predictions of future trends.



Who has the most living space?

To understand trends in home design, we first wanted to learn about house sizes in the 12 countries. Ascertaining averages is not always possible, since national minimum standards do not always exist, and the way 'living space' is defined varies from one country to the next.

Listed here are the legal minimum sizes for one-person homes – naturally, the average home is far larger in most cases. However, it does speak to how government bodies have understood an individual's need for space.

That being said, some identifiable differences emerge:

- Countries with the highest minimum standard sizes for homes are the UK, Spain and Austria - a one bed apartment in the UK must be at least 37m^2, in Spain it is 36m^2, and in Austria it is 30m^2. In fourth place is Poland, where the minimum is 27.5m^2.

- Other European countries have middling minimum apartment sizes. In France, the smallest legal dwelling is 14m^2 – the same as in Italy. Czechia requires at least 16m^2.

- In some nations, including the US, minimum standards vary from state to state. New York, for example, has a minimum apartment size of 150 square ft, or 13.9m^2 , putting it on a par with France. While there is a national building code in the US, it simply states that buildings should be the appropriate size for the number of residents and are safe for the purpose they serve, leaving the decisions on minimum standards up to each state.

- The UAE also varies its building codes from one emirate to the next. Dubai's building code, for example, states that the smallest private residential dwelling should be 21m^2.

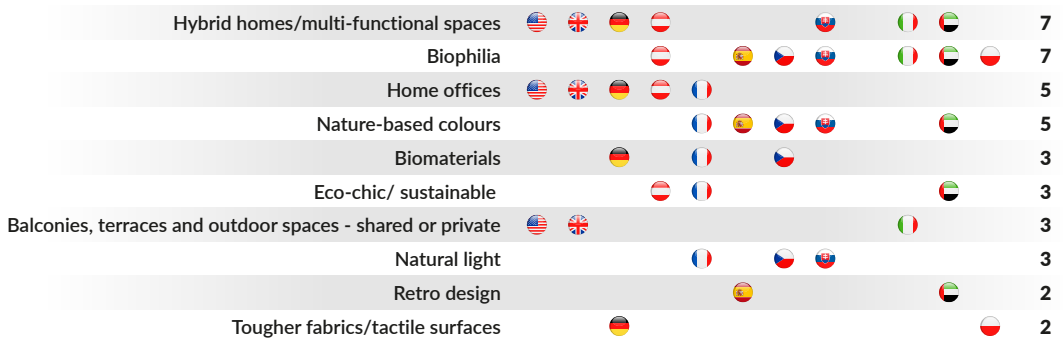
Are homes trending larger or smaller?

It is challenging to say precisely whether or not homes are getting larger or smaller in the 12 countries we studied. However, in some of the countries, certain trends could be identified.

- In the UK, a 2015 law set the new minimum size for a one bed, one person flat at 37m^2, and a three-bed, five-person home at 93m^2.
- In the USA, legislation about house sizes is implemented at the state level. That said, the AIA noted that there was an increase in the size and number of bathrooms in homes over 2020/21, which suggests homes are getting larger.
- In France, the minimum surface area for the smallest category of home will rise to 28m^2 from 2023, double what it is today.
- In Austria, statistics show that the average household size has been declining for a decade, and data from one small census found average dwelling sizes had decreased slightly from 99.7m^2 in 2014 to 99.2m^2 in 2015) - although this is still much larger than average home sizes in the 1990s when they were around 86m^2.

Which interior design trends are predicted to be popular?

What to expect for interiors of the future?



Changing tastes in home design reflect more than short-term fads; they also represent major societal shifts and concerns. This is reflected in our findings.

Sustainability

According to our research, sustainability is probably the biggest trend in future interior design. In seven of the 12 countries, 'biophilia' (the idea of using plants, water and other natural materials) indoors and outdoors is expected to rise in the near future. A quarter of countries (Germany, France, Czechia) expect biomaterials to be a big trend in interior design, while Austria, France and the UAE see 'eco chic' as a major trend. Consumers around the world are concerned about the climate crisis, and there is clearly strong interest in design which can help tackle this global problem.

Hybrid homes & home offices

The pandemic has, without a doubt, transformed the nature of homes, and they are now a place of work for many. In seven of the 12 countries, hybrid homes with multifunctional spaces are identified as a key trend – people want places they can turn into a home office during working hours, then pack away to use as a living room (or something else). In five of the 12 countries (USA, UK, Germany, Austria, France) home offices are explicitly expected, providing a dedicated space for work.

Blending indoors and outdoors

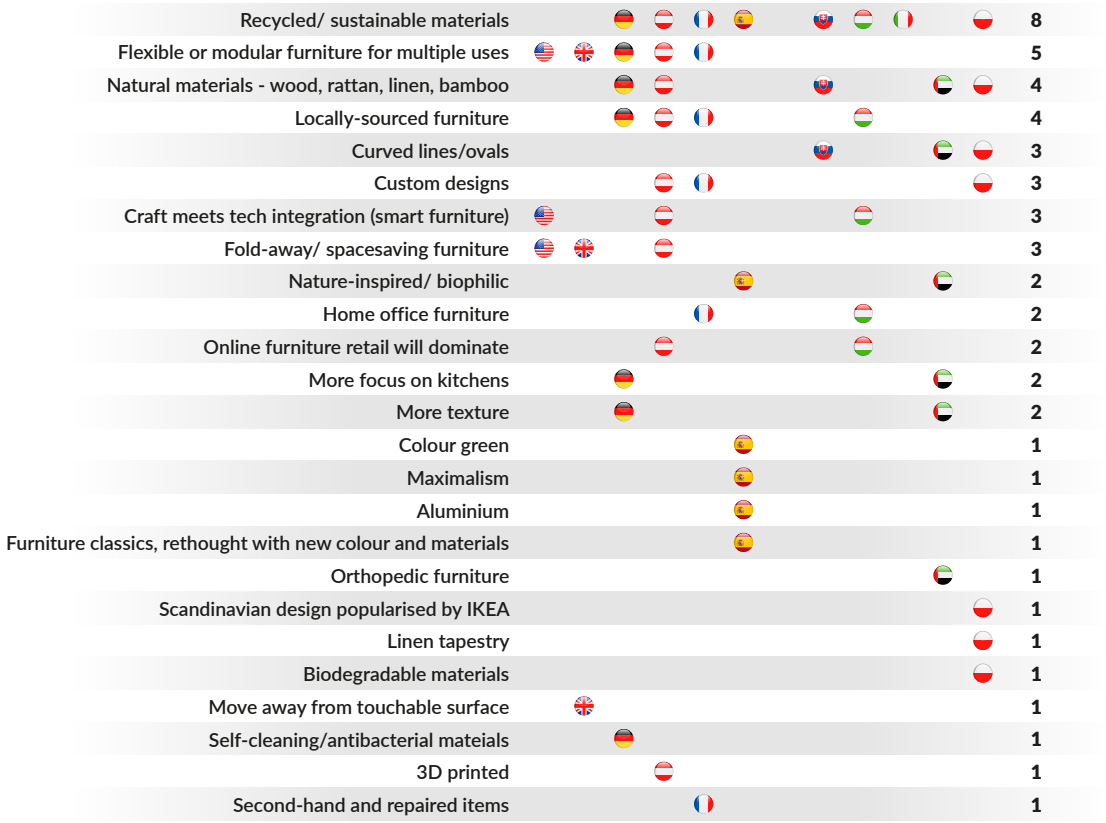
The COVID-19 lockdowns may well have influenced people's tastes in other ways too. A quarter of countries are now prioritising more outdoor space – surely a response to months locked up at home. Meanwhile in the USA, UK, Austria and France, people expressed greater interest in communal spaces - perhaps a response to isolating lockdowns. Meanwhile, France, Czechia and Slovakia expressed an explicit interest in increasing the amount of natural light present in homes. Whether via biophilia, increased natural light or the addition of balconies or gardens, it's clear that there is more appetite than ever for interiors that keep people in touch with the outdoors.

Unique ideas & outliers

While some of these expectations are universal, it's also striking how much tastes differ between countries on most measures. Americans are the only people to want more outdoor kitchens. Brits uniquely want more soundproofing. Germans want self-cleaning surfaces, Poles are keen on sitting on ottomans (rather than armchairs) and brown tones, and the Spanish are alone in wanting more rounded shapes in their interiors. The French have the most eclectic tastes, expressing interest in 12 of a possible 35 trends, followed by Americans, Brits and Poles.

Which furniture trends are changing the way we live?

Will furniture be different? In what way?



As noted in the previous section, people's tastes in interior design is often quite unique, and the same goes for tastes in furniture.

Indeed, there was only one trend (recycled/sustainable materials) which was present in more than half of countries – it was cited as important in eight of the 12 (Germany, Austria, France, Spain, Slovakia, Hungary, Italy, Poland). This undoubtedly ties in with more general concerns about sustainability. This is also surely why a third of countries expect to see more natural materials used in furniture (Austria, Slovakia, Poland and the UAE) and a third are also particularly conscious of local supply chains (Germany, Austria, France and Hungary). This last point may also be tied to the disrupted supply chains that have delayed the delivery of furniture and materials manufactured in China.

The pandemic also appears to have influenced home furniture choices too. Flexible or modular furniture is likely to be found in more homes in the US, UK, Germany, Austria and France, and foldaway furniture is expected to become more popular in the US, UK and Austria too. Meanwhile, demand for orthopaedic furniture is likely to grow in the UAE, and home office furniture is expected to sell more in France and Hungary.

We also identified a growing taste for artisanal furniture. Custom-made designs will be sought out in Austria, France and Poland, while craft furniture that includes smart tech is set to grow in the US, Austria and Hungary.

But the differences in furniture tastes are perhaps the most noticeable finding from our study, with each nation demonstrating quite different tastes. Here are just some examples which demonstrate how localised tastes can be.

- Only Spain and the UAE want 'nature inspired' furniture, and the Spanish are unique in wanting more green furniture in their homes.
- Poland is the only country that will see a growing taste for Scandinavian style design, in the IKEA style, and the Poles are also unique in wanting furniture made from biodegradable materials.
- Germany would like to see more self-cleaning materials in its furniture – tying in with the point raised in the previous section about self-cleaning surfaces.
- Austria wants to see more 3D printed chairs, tables, beds and desks.

Smart home devices: which will we see the most of?

The concept of 'smart homes', which incorporate sensors and other technology to enhance comfort while saving money, has seen rising interest in recent years. Technology is becoming ever more ingrained into our lives, and so we wanted to see how homes would evolve to incorporate it.

Three clear 'winners' stood out in this category: advanced lighting systems (11 countries), smart thermostats, and home security (10 each). These technologies are already fairly widespread and advanced, but it is striking that they are now set to be the norm in homes worldwide. This rapid, global penetration of new technology into the private sphere represents an enormous change in how people live today compared to the recent past.

The expected popularity of these systems surely stems from the clear benefits they deliver:

Similarly, smart **thermostats** help people cut their bills by showing them which domestic appliances are using most energy and when (this is surely linked to smart HVAC – which will be common in eight countries). In Europe in particular, the ongoing energy crisis may accelerate the pace of uptake.

Smart lighting helps people save electricity, and can also improve their mental health (light tones are known to affect mood, sleep, concentration and more).

Smart security devices give greater peace of mind (also closely tied to smart doorbells that will appear in five countries, smart home cameras in four, smart fire safety devices in four and health sensors, also in four countries).

People are looking to interact with technology too. Smart speakers (such as Amazon's Alexa) are set to grow in eight of the 12 countries.

There's also a taste for smart appliances to take on menial household tasks. Expect robot vacuums in seven of the 12 countries, robot lawnmowers in two, robotic fridges in seven, and smart washer/driers in three countries.

It comes as no surprise that the USA comes joint first (along with France) for its interest in smart home devices – expressing interest in 14 of 24 smart home technologies. The country has long been a leader in technological innovation. Italy and Germany showed interest in 11 of the technologies, while the UK, Czechia and Poland see potential for seven. Slovakia was least interested in smart home devices, selecting only five.

On the opposite end of the scale, there were several smart home technologies that seem to only appeal in one or two places:

- Italy: The only country to expect smart pet dishes and child monitors to be a big thing
- USA: The only taker for social companionship robots and smart water leak detectors, perhaps tied to the lengthy drought that has been ongoing in the South West
- France and Germany: The only nations expressing a major interest in robot lawnmowers

The changing nature of ‘home’

Throughout human history, the way we use our homes, design them, and how much space we allocate to them, has constantly changed. Our research shows that the changing nature of homes continues to evolve today, as societies adapt to new pressures, tastes and technologies.

The data we have collected reveals just how deeply the pandemic has changed what we want from our homes. In a growing number of countries, people want more space to do work at home. Whether it’s through dedicated home offices, foldaway desks or flexible room design, there’s a clear trend towards making work from home easier.

The pandemic has changed homes in other ways too. We found experts predicting greater taste for outdoor space, communal areas, and the use of hygienic design elements.

The global challenge of climate change means people are increasingly interested in interior design that uses sustainable materials. A taste for recycled or repurposed furniture is evident. Similarly, consumers are expressing interest in biodiversity, hoping to bring nature into their homes with biophilic design features, as well as more natural materials

Technology is also set to shape our taste in housing too. Our research shows clear interest in a wide range of smart home technology, with advanced lighting systems, smart thermostats and smart home security almost universally predicted to grow.

By learning about these trends, and understanding shifting tastes around the world, interior designers, architects, property developers and other industry players can create spaces that are appropriate for people’s needs and desires in the coming years.

About PlanRadar

PlanRadar is an award-winning, digital SaaS field management platform for documentation, task management and communication in construction and real estate projects.
We operate in over 60 markets around the world.

PlanRadar digitises all daily processes and communication across real estate and construction. The platform connects all project stakeholders and provides real-time access to valuable project data, enabling teams to increase quality, cut costs and realise work faster.

The easy-to- use platform adds value to every person involved in a building's lifecycle, from contractors and engineers to property managers and owners, with flexible capabilities for all company sizes and processes.

Today, over 100,000 professionals are using PlanRadar to track, connect and solve issues on- and off-site. PlanRadar is currently available in 19 languages, and can be used across all IOS, Windows and Android devices.

Headquartered in Vienna, Austria, PlanRadar has offices across the globe.

If you want to learn more about PlanRadar, get in touch today.