



# HOME OF 2030 DESIGN COMPETITION BRIEF

## PHASE 1

**NOTE: This is a simplified version of the brief issued for Phase 1 of the Home of 2030 competition. The competition has now closed. For full information visit [www.homeof2030.com](http://www.homeof2030.com)**

# BACKGROUND

The Home of 2030 competition seeks to develop a home that will help tackle the key challenges facing our society. It focuses on solving multiple issues: to generate new typologies and products that are age friendly and inclusive, address health and wellbeing but at the same time harness new and evolving techniques and technologies for a low carbon and energy efficient future. The competition is focused on deliverability, cost-effectiveness and design quality and addressing gaps that there may be in the market, due to the following:

- By 2030, 21.8% of the UK population will be over 65 years old. Between 2016 – 2036 the projected population change shows an increase of 36% of people aged 65 – 79 and a 69% increase in those aged 80+. The Government's Ageing Society Grand Challenge mission is for people to enjoy 5 more years of healthy, independent living by 2035.
- It is estimated that illness and injuries caused by poor housing costs the NHS £2 billion per year in the first-year treatment costs with those spending most time at home being especially affected.
- Work and travel trends are set to change significantly, with more people working from home and for longer. This will be combined with growing demands for digital and smart technologies in the home.
- Around 20% of homes in England overheat, and 1.8 million people live in areas at significant risk of flooding. Conversely, areas of the UK with the greatest housing demands suffer from water scarcity.
- Homes are responsible for 14% of carbon emissions in the UK. By 2030, this needs to reduce by a minimum of 24%, with new homes which are low carbon, ultra energy-efficient and climate resilient. As we move to zero (operational) carbon in new homes, the focus is shifting to embodied carbon and other impacts associated with the resources used to construct them.
- It is estimated that around 240,000–340,000 homes per year need to be built by mid-2020s to meet current housing requirements. Irrespective of increasing number of households and rising real incomes, new housing supply has been steadily decreasing since the 1970s. This is contributing to unaffordability and unsuitability of homes to changing needs.
- Public engagement carried out in formulating this brief shows emerging recognition that there is a general dissatisfaction with current housing options and growing appetite for fresh thinking and innovation to encourage community cohesion, inclusiveness and increased social connections, which when coupled with active lifestyles contributes to greater independence, healthy ageing and better support mechanisms in times of crisis.

*The Home of 2030 competition is a cross Government initiative that brings together MHCLG (the Ministry of Housing Communities and Local Government, responsible for housing supply, standards, planning and building safety), BEIS (Business, Energy and Industrial Strategy, responsible for innovation and business strategy) and DHSC (Department of Health and Social Care, responsible for health, wellbeing and issues arising from an ageing population). Each of the departments is seeking a benefit: increased housing supply through greater diversity in the market, improved quality and standards in homes through innovation and technology, and social, environmental and economic benefits arising from better health outcomes. Homes England, the Government's housing accelerator, are engaged in the initiative and may lead a subsequent development phase subject to successful development bids by Homes England Delivery Panel and Winner consortia.*

# OBJECTIVES

The core Two-Phase open ideas competition aims to achieve the following 4 objectives:

1. **AGE FRIENDLY AND INCLUSIVE LIVING**  
Address a gap in the housing market for new homes which appeal to and cater for a variety of age groups, adaptable to changing uses and needs over lifetime for a healthy and inclusive community.
2. **LOW ENVIRONMENTAL IMPACT**  
Applying technology and construction techniques that will deliver net zero emissions and high quality outcomes, reduced fuel bills and improved occupant health.
3. **HEALTHY LIVING**  
Promoting better health and wellbeing to enhance quality of life within homes.
4. **DELIVERABLE AND SCALABLE**  
Solutions that can deliver market needs at scale and are cost-effective.



# EVALUATION WEIGHTING

Evaluation of anonymous entries to Phase One of the competition will be based on the following weighting:

- Response to the brief – 60%, which comprises the key objectives:
  - Age friendly and inclusive living – 15%
  - Low environmental impact – 15%
  - Healthy Living – 15%
  - Deliverable and scalable – 15%
- Overall quality of the design approach – 25%
- Creativity and innovation – 15%

# OUTCOMES

The outcomes we are seeking are:

- New typologies in the market for inclusive, age friendly homes, including innovative new responses and options;
- New products that are replicable and deliverable to increase housing supply through greater diversity;
- Increased environmental and energy performance of new homes;
- Lower environmental impact of housing development;
- Improved health outcomes to enhance people’s wellbeing and happiness and to help save on costs and pressures on health services and social care;
- New developers, contractors, supply chains, funders and delivery partnerships;
- Following the competition, we also hope that new funding streams will come forward to invest in adaptable housing.

# BRIEF INFORMATIVES

Proposals should be able to demonstrate how the multiple attributes outlined below are considered in their holistic response and how innovative approaches, as well as product and process innovations, are deployed.

<b>Age friendly &amp; Inclusive living</b>	<ul style="list-style-type: none"> <li>• A well designed, accessible and attractive place that functions well for a range of lifestyles, creating a sense of place in a community. Offers a sympathetic response to local and site context and can be configured for a range of densities e.g. At 75 dwellings per ha as well as at 30-40.</li> <li>• Home and neighbourhood to be designed for mixed households with due consideration given to HAPPI design principles supporting healthy living.</li> <li>• Flexibility of design of mainstream homes with the provision for adapting to changing occupancy needs over time and allow easier maintenance.</li> <li>• Provision and interaction of shared facilities, space and management to support social interaction, social connections and create community cohesion.</li> </ul>
<b>Low Environmental Impact</b>	<ul style="list-style-type: none"> <li>• Energy and systems efficiencies include low carbon technologies and substantially reduce energy demand and greenhouse gases in line with the Government’s net zero emissions target.</li> <li>• Homes which use emerging technologies to reduce carbon emissions beyond the 2025 Future Homes Standard.</li> <li>• Whole life performance of homes has been considered for value for all stakeholders. The proposal should deliver the lowest possible running costs.</li> <li>• Construction method and materials used reduce embodied impacts, such as responsible sourcing, low environmental impact and circular economy (including design for reuse).</li> </ul>
<b>Healthy Living</b>	<ul style="list-style-type: none"> <li>• Indoor environmental conditions are optimised for thermal comfort, daylight, noise, ventilation, air quality, and safety.</li> <li>• Built-in resilience by mitigating the risks from changing climate such as flood risk, overheating and water scarcity.</li> <li>• Functional needs of a home are met with adequate floor area, storage, range of socialising spaces, visual connection to the street/communal outdoor space to encourage feelings of connectedness, and access to outdoor space.</li> <li>• Digital enabling solutions should be considered with due regard for data security – from home working to care requirements. Integrates digital infrastructure to engage the residents with the wider community.</li> </ul>
<b>Deliverable and Scalable</b>	<ul style="list-style-type: none"> <li>• Addresses productivity challenges through speed of delivery and the ability to up-skill the supply chain.</li> <li>• Enables cost reduction at scale to make mainstream homes affordable through replicability &amp; mass customisation in varied build typologies and context.</li> <li>• Delivers building quality by using construction techniques and digital technologies both on- and off-site; sharing information with stakeholders to demonstrate value in construction, in-use performance and innovation applications.</li> </ul>

Additional issues that the competition may address are:

- Mixed tenure and non-tenure specific solutions;
- A mix of typologies
- Social integration enabling increased social connections, benefiting health and wellbeing.
- Encourages diversity of construction methods and brings MMC and its benefits to the market;
- Enabling digital construction and operation;
- Whole life costs.

## **COMPETITION PHASES**

### **PHASE ONE**

Phase One of the Home of 2030 design competition seeks to:

- Invite teams to illustrate a multidisciplinary approach to a deliverable housing concept which can be configured at different densities/scales.
- Stimulate a wide range of ideas, designs, products and solutions, from across the industry.
- Seek initial responses from designers, developers, SMEs, contractors, funders and product suppliers, as well as landowners (including local authorities), to propose practical ideas to address the brief in different contexts.
- Integrate innovative approaches and technologies to delivering the objectives – [with reference to the Innovation Challenge Directory and other products and systems].
- Showcase products and innovations that exist in the market which require opportunities to scale up their application.
- Seek new entrants to the market from UK or beyond for diversity of supply.

Phase 1 is non-site -specific and entries are anonymous, although registration will require a named team.

After evaluation, the shortlisted 6 entries will be selected for progression to Phase 2 and identified for publicity purposes.

### **PHASE TWO**

The aim of Phase 2 is for the shortlisted teams to produce deliverable proposals with supporting detail for a live site development. The shortlisted teams will each receive an honorarium on completion of the Phase 2 requirements and will need to declare the key members of their delivery proposition and the competencies and eligibility of their team.

The Phase 2 brief will require the shortlisted teams to develop their concept from Phase 1 in sufficient detail for evaluation to satisfy the requirement for a deliverable product for an identified site (outside London) in a growth area for a proposed parcel of up to 100 homes. Land will be identified by Homes England in the form of a serviced site with key infrastructure in place within a large scale phased mixed development. Phase 2 proposals should set out a typical street frontage for around 12 homes, to include detailed configurations for at least two different typologies, to fully

illustrate the deliverability and versatility of their concept proposal. Proposals should also show how they respond to local distinctiveness and provide opportunity for community cohesion.

Phase 2 submissions will include design and development proposals, outline costs and implementation plans. The final submissions will be evaluated against the briefing criteria and promoted and given publicity after their honorarium is rewarded, before the next phase of activities commence.

Outcomes from public engagement and the Home of 2030 young persons' competition will be available to all entrants as background to the competition requirements at this phase.

The six Phase 2 submissions will be assessed according to the published criteria, with honoraria awarded to all shortlisted entrants and awards for three winners.

## **BEYOND THE COMPETITION**

On completion of Phase 2 of the RIBA Open Ideas competition, winners will be introduced to Homes England development partners to explore the possibility of developing bids for a series of homes on Homes England land. Should homes subsequently be built, this will serve as a real-world exemplar of a viable age-friendly and energy efficient development.

The competition's aim is to champion innovation by engaging with leading technical and design sectors to submit competition entries which lead to viable designs which could be adopted by the housebuilding sector and to engage with consumers and businesses in the further normalisation of this form of housing.

# THE KEY OBJECTIVES

COMPETITION OBJECTIVES	PHASE 1	PHASE 2 (indicative at this stage). Detailed evaluation criteria will be published in full for those shortlisted to proceed to Phase 2
Age friendly and inclusive living	<ul style="list-style-type: none"> <li>Contextual response for a range of densities: 30- 75 dwellings per ha (non-site specific)</li> <li>Placemaking &amp; social interaction opportunities</li> <li>Access to outdoor space designed to encourage and enable activities to support social connectivity, health and well-being</li> <li>Planning of spaces and services that enable re-configuration over time</li> <li>Accommodating a variety of uses</li> <li>Accessible and adaptable design, in the context of the Government’s forthcoming review of the Building Regulations for Part M: Access to and use of buildings</li> </ul>	<p>A site-specific set of proposals illustrating a proposal for 2-3 typologies in a streetscape setting with unit plans, sections and Illustrative details, 3D models [Drawing Scale – refer to competition conditions] showcasing:</p> <ul style="list-style-type: none"> <li>Adaptability of homes for re-configuration of spaces and functions over time</li> <li>Integration of social and physical infrastructure to promote inclusiveness, social connections (including intergenerational), community cohesion and healthy living</li> <li>Promotion of positive social interaction to good mental health and wellbeing outcomes</li> <li>Ease of access from door to local amenities and wider public transport</li> </ul>
Low environmental impact	<ul style="list-style-type: none"> <li>Minimal energy demand through fabric and system efficiency</li> <li>Low carbon technologies</li> <li>Low embodied carbon in construction and supply chain</li> </ul>	<ul style="list-style-type: none"> <li>Fabric and system efficiency attributes</li> <li>Anticipated performance in-use</li> <li>Template for material efficiency and whole life carbon reduction</li> <li>Template for efficient and responsible sourcing</li> </ul>
Healthy Living	<ul style="list-style-type: none"> <li>Design and technologies to optimise internal environment</li> <li>Resilience to climate change impacts</li> <li>Designed to encourage healthy lifestyles/keeping active (including for ageing people)</li> <li>Appropriate digital solutions to meet the needs of wider age-groups and which are simple and easy to use</li> </ul>	<ul style="list-style-type: none"> <li>Template for internal environment quality and wellbeing</li> <li>Anticipated performance to adapt to climate change</li> <li>Integration of digital infrastructure - home working, support/care needs, social interaction and community engagement</li> </ul>

<b>Deliverable and scalable</b>	<ul style="list-style-type: none"> <li>• Modern construction and methods to deliver construction quality at scale</li> <li>• Replicability &amp; mass customisation for varied build typologies and contexts</li> <li>• Responsible and efficient material use</li> </ul>	<ul style="list-style-type: none"> <li>• Buildability – Details/drawings/illustrations</li> <li>• Quality Indicators (e.g. Speed of delivery, quality control)</li> <li>• Cost and deliverability – Innovation Cost vs Capital cost, Pre-manufactured Value; Prototype costs, Costs at scale</li> </ul>
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## EVALUATION PANEL

The Evaluation Panel for both Phase 1 & 2 of the competition will be confirmed in due course.

In the event of an Evaluation Panel member being unable to continue to act through illness or any other cause, the client group, in consultation with the Home of 2030 delivery consortium, reserves the right to appoint an alternative Panel member.



# COMPETITION CONDITIONS

## COMPETITION MANAGEMENT

The competition is being managed and administered by RIBA Competitions on behalf of the Home of 2030, to whom all queries relating to the competition should be addressed.

## ELIGIBILITY

The competition is open internationally to registered architects, designers, engineers and innovators however whilst it is not a requirement to be based in the UK, entrants should have a UK office. Multi-disciplinary teams are encouraged to take part. Architects should be registered with the Architects Registration Board (ARB) in the UK, (or an equivalent, recognised overseas regulatory authority). Entrants should note that second stage competitors will be invited to attend an interview in the UK.

No member or employee of the promoting body, the evaluation panel, or any partner, close associate or employee of them is eligible to compete or assist a competitor.

## COMPETITION FORMAT

The competition will follow the open ideas competition format and will be organised in the following phases:

### PHASE 1:

Submission of concept design ideas assessed anonymously.

### PHASE 2:

A shortlist of up to six designs will be selected and the entrants invited to develop their concepts and present them to the Evaluation Panel.

## HOW TO REGISTER AND ENTER

You may only submit an entry to the competition if you are officially registered through Home of 2030 and in possession of a Unique Registration Number (URN). Please complete the online registration form. <http://ribacompetitions.com/homeof2030/register.html>

Once your registration has been processed, you will be issued with a Unique Registration Number (URN) and a declaration form.

## DECLARATION OF AUTHORSHIP & ACCEPTANCE OF COMPETITION REGULATIONS

The declaration form acknowledges authorship of the design ideas, and by signing it, entrants agree to abide by the competition conditions and the decision of the Evaluation Panel as final. The completed declaration form should be uploaded to the digital entry system along with the design submission.

Please note the team members stated on the declaration form will be used as the credits in all promotional activity so please ensure this is reflected accurately.

## COMPETITION TIMETABLE

The anticipated programme, which may be subject to variation, is as follows:

[UPDATED: 31 March 2020]

Deadline for entrants to raise questions	Friday 27 March 2020
Response to questions issued by	Friday 3 April 2020
Deadline for entrants to raise additional questions	Friday 17 April 2020
Response to additional questions issued by	Friday 24 April 2020
<b>Phase 1 Submission Deadline</b>	<b>Wednesday 3 June 2020 by 14.00 hrs</b>
Pre-assessment of entries by Technical Panel (if needed)	w/c 22 June 2020
Evaluation session of Phase 1 Designs for full panel	w/c 6 July 2020
Notify shortlist and unsuccessful entrants	w/c 20 July 2020
Press release announcing shortlist	w/c 27 July 2020
Feedback issued to shortlisted teams and additional briefing information	w/c 27 July 2020
<b>Phase 2 Submission Deadline</b>	<b>Tuesday 29 September 2020</b>
Final interviews/ presentations	w/c 19 October 2020
Notification and result announced	November 2020

## QUESTIONS

Questions relating to the competition Brief and conditions must be submitted to Home of 2030 at [enquiries@homeof2030.com](mailto:enquiries@homeof2030.com) before close of business on Friday 17 April 2020. A statement in response to all questions raised will be emailed to registered entrants by 24 April 2020.

## ANONYMITY

All Phase 1 submissions will be evaluated anonymously, via use of the Unique Registration Number (URN) issued at the time of registration. The URN should be prominently displayed on each of the design submission sheets, report and declaration form. Please refer to the section How to Register to obtain a URN. Any submission that has identifying marks (including logos, text, insignia, or images that could be used to identify the submission's authors) will be automatically disqualified.

## DISQUALIFICATION

Submissions shall be excluded from the Competition:

- If an Entrant shall disclose his or her identity, or improperly attempt to influence the decision;
- If received after the latest time stated under Phase 1 Submission Method;
- If, in the opinion of the Evaluation Panel, it does not fulfil the requirements of the Competition Brief;
- If any of the mandatory requirements of the Competition Brief and Conditions are disregarded.

## **PHASE 1 SUBMISSION REQUIREMENTS**

There are four elements to the design submission, each of which should bear the Unique Registration Number (URN) only. Entrants should refer to the Anonymity requirements and submit the following material digitally:

### **1. A3 SHEETS**

A maximum of 2 x landscape sheets (equivalent to A3 in PDF format only) illustrating the proposed housing concept, its constituent parts and how it meets the competition objectives.

The proposals should be presented in a clear and succinct manner to enable Evaluation Panel members to readily understand the essence and design drivers behind the scheme.

Please note that the submissions may be viewed on a tablet, laptop or large screen and may also be printed out at A3 for the purposes of assessment, so this should be taken into consideration when putting together the submission.

The URN should be prominently displayed on the front face of each design sheet in the top right hand corner, together with the order in which the sheets should be viewed (1 of 2 etc).

Physical architectural models will not be accepted as part of the Phase 1 submission. However, images of models used to develop the design proposal may be included on the design sheet(s).

### **2. A4 DESIGN STATEMENT**

A written design statement (max 4 x A4 single sided pages) in support of the submission.

### **3. DECLARATION FORM**

A completed declaration form which should bear the URN in the dedicated section on the form. Please note the team members stated on the declaration form will be used as the credits in all promotional activity so please ensure this is reflected accurately.

### **4. VISUAL IMAGE**

In addition, to the pdf of the design sheets, one visual image of the design concept should be provided for publicity purposes. The image should be representative of the ideas proposed and be readily identifiable as such. The image should be submitted in JPEG format, in a low resolution (72ppi) with an image width of at least 1000px.

## **PHASE 1 SUBMISSION METHOD**

Each phase 1 design submission should be uploaded to the Home of 2030 digital entry system before 14.00 hours on Wednesday 3 June 2020. Further details and a unique secure link will be issued to registered competitors.

Please note that the total upload should not exceed 20MB.

Late entries will not be accepted and the digital entry system will not permit uploads after the deadline. The digital entry system will allow you to amend or delete the information you upload until the stipulated deadline date and time. You are strongly advised to familiarise yourself with the system and to allow adequate time for your submission material to successfully upload.

## **PHASE 2**

Further briefing information will be provided to the shortlisted entrants and they will be provided with feedback from Phase 1 and asked to further develop their initial design ideas for a specific site location illustrating in greater detail how their proposals meet the multiple objectives of the competition, and can be delivered at the scale and density required for the chosen site. Drawings of a sample streetscape of say twelve homes, including details of a minimum of two or three home typologies, will be expected to illustrate the delivery potential of the concept. Teams will be required to set out compliance with the different criteria including budget costings in a technical report, and to demonstrate how their team and systems selection can meet the delivery and competency requirements of a development consortium.

The shortlisted entrants will be invited to attend an interview to discuss their design concepts further with the Evaluation Panel.

Entries for both phases must be submitted in English.

## **ONLINE GALLERY**

An online gallery of all entries may be showcased at the conclusion of the competition. Further details will be issued to competitors in due course.

## **NOTIFICATION OF RESULT / PUBLICITY**

The competition results will be published after all entrants have been notified. Please note that any requests for feedback should be submitted to Home of 2030 within one calendar month of a shortlist, or a result being announced.

Entrants must not release their designs for publication to any 3rd parties until after the shortlist or result has been officially announced and permission has been granted from Home of 2030. Entrants should note that by entering the competition they are expected to honour the request for confidentiality to prevent information on the shortlist or the winning teams being leaked to the Press before any official announcement is made.

Home of 2030 reserve the right to publicise the competition, any design submission, and the result in any promotional activity, including all social media channels, they consider fit. Illustrations of any design - either separately, or together with other designs, with or without explanatory text - may be used without cost. Once anonymity has been lifted, authors will be credited and recognised in all associated media and publicity. This information will be taken from the declaration form so please ensure the details are accurate.

## **HONORARIA**

It is intended that up to 6 entrants will be selected to proceed to the second phase. Each shortlisted entrant who submits a completed Phase 2 entry will receive an honorarium of £40,000 +VAT.

The client undertakes to pay these honoraria payments within six weeks of the conclusion of the competition. Invoices for payment should be submitted to Home of 2030.

## **COPYRIGHT**

The ownership of copyright will be in accordance with the Copyright, Designs and Patents Act 1988 - i.e. Copyright rests with the author of the submitted design.

## **POST COMPETITION**

Following Phase two of the RIBA open ideas competition, competition winners will be introduced to Homes England development framework partners to explore the possibility of developing bids for a series of homes on Homes England land.

The role of RIBA Competitions and Home of 2030 is limited to the administration and management of the competition process. The RIBA and Home of 2030 delivery consortium will have no further role once the winners have been selected and entrants notified.

# REFERENCES

**NOTE: for full reference list and links to reports, please refer to the Home of 2030 competition website**

## Age-friendly, inclusive and healthy living

- By 2030, one in five people in the UK (21.8%) will be 65 years old or over, and 40% of the working age population will have a long-term health condition [ONS, 2017]. The Government's Ageing Society Grand Challenge mission is for people to enjoy 5 more years of healthy, independent living by 2035. Through innovative technologies, finance and housing models the mission is enabling continuation of access to employment, care and help to stay connected to overcome loneliness, regardless of age. Decent and accessible homes are key to continue to live in our own homes. However, 93% of our current homes fail accessibility standards [MHCLG, 2016]. It is estimated that illness and injuries caused by poor housing with a significant HHSRS hazard, costs the NHS £2 billion per year in the first-year treatment costs [Nicol,S, 2011]. With most of us spending 65% of our time indoors at home provision of a healthy and safe internal environment is fundamental [UKGBC, 2016]
- The future labour market is expected to be significantly shaped by the emergence of technology-led interconnectivity and collaboration [UKCES,2014]. Flexible working is estimated to contribute £148 billion to the UK economy by 2030 [Workplace insight, 2018]. Work and travel trends are set to change significantly, with more people working from home and for longer as they age. This will be combined with growing demands for digital and smart technologies in the home.
- Loneliness affects people of all ages, with younger adults aged 16 to 24 years having reported feeling lonely more often than those in older age groups. In 2017-18, 8% of 25-34 year olds reported feeling lonely often or all of the time, compared to 5% of 50-64 year olds and 3% of 65-74 year olds. [ONS, 2018]
- We need the right type of homes that meet the needs of all age groups and household types. *24% of over 55s are considering moving home; 49% of this group said that they were prevented from moving by the lack of housing options*" (Stern, D, Warren, I and Forth, A, 2019)
- In 2019, a poll of 4000 UK adults found that 72% of people agreed that homes should be built *to be suitable for all ages and abilities*. The same poll identified that 62% of respondents *don't think their current home would be suitable for a person with a disability or an older relative to move around*, with 45% of over-65s concerned that they would struggle *with everyday activities like cooking, bathing or eating in the future*. A quarter of 18-24s (25%) and 25-34s (28%) say they would be encouraged to buy homes with features such as level access entrances, walk-in showers or handrails with around half of that age-group saying they would be neither encouraged nor discouraged (Centre for Ageing Better, 2019)
- Families and households are changing, with increasing numbers of people in their 50s and 60s living alone and divorcing. This has implications for the role of communities in ensuring people remain physically and socially connected and supported in later life [Centre for ageing better, 2019].
- 3.4% of people aged over 50 move home each year, half as many as other age groups. *The majority of older people appear to be in a 'rightsizing gap', where housing options supporting a better quality of life are neither available nor accessible to them.* (Centre for Ageing Better, 2019)

## Climate change

- In June 2019, the Government set a legally binding target to bring all greenhouse gas emissions to net zero by 2050. Buildings Mission 2030, led by the Department for Business, Energy & Industrial Strategy (BEIS), aims to at least halve the energy use of new buildings by 2030. Homes are responsible for 14% of carbon emissions in the UK. By 2030, this needs to reduce by a minimum of 24%.
- Evidence shows a substantial performance gap in energy performance and build quality of new build homes. The housebuilding sector and housing design must respond to these issues and provide highly energy efficient new homes with the highest architectural and build quality.
- The construction industry is converging in defining a framework and approaches to deliver net zero carbon (in operation), the focus is shifting to include embodied carbon and other impacts associated with the materials used to construct them.
- Every year about 2,000 deaths in England and Wales are estimated to be heat-related. With a changing climate this number is expected to triple to over 7,000 by 2050. Around 20% of homes in England overheat, and 1.8 million people live in areas at significant risk of flooding. Conversely, areas of the UK with the greatest housing demands suffer from water scarcity (CCC 2019).

## Housing supply and productivity

- Around 340,000 homes/year need to be built by mid-2020s to meet current housing requirements. However, in 2018, only 165,090 new homes were completed. The proportion of flats in the housing mix had more than halved by 2016/17 to 21% of output, while the proportion of one- and two-bedroom homes fell from 53% of output to only 29% by 2016/17. Annual shortfall in build and housing type, continues to contribute to increasing levels of unaffordability and unsuitability of stock to ageing population.
- House building needs a 340k workforce to deliver 250,000 homes a year, but we are 40% short. This, combined with an ageing construction demographic and 30% of the construction workforce being aged over 50, means we do not have enough skilled workforce to deliver the rate of output required. Low productivity, poor predictability of completion date and cost of construction is a challenge for both clients and supply chain.
- Smart construction and digital design are two strategic priorities set out within Construction 2025. This forms the basis for a number of policies focusing on digital solutions such as Building Information Modelling (BIM) and adopting modular construction to ensure quality of construction and increase rate of delivery. Whilst there is a significant opportunity to delivery good quality, sustainable homes at a higher delivery speed, it is vital to ensure that new build homes are acceptable to consumers, adaptable and flexible over time.

## ENQUIRIES

The competition is being managed and administered by RIBA Competitions on behalf of Home of 2030. All enquiries relating to the competition should be directed to:

+44 113 203 1490

[enquiries@homeof2030.com](mailto:enquiries@homeof2030.com)

Members of the Evaluation Panel, the client group, the Home of 2030 Delivery Consortium or the RIBA Adviser should not be contacted for information as this may lead to disqualification from the competition.