

# Policy paper: Progress towards the sustainability of the building stock in England: sixth Parliamentary report

*Updated:* Erratum: “Metric tonnes” on page 8 should read “million tonnes”. This has been corrected in both downloads of the report.

Section 6 of the [Sustainable and Secure Buildings Act 2004](#) requires a biennial report on the sustainability of the building stock in England.

This current report covers progress between November 2014 and November 2016 (unless otherwise stated) in relation to:

- furthering the conservation of fuel and power
- preventing waste, undue consumption, misuse or contamination of water
- furthering the protection or enhancement of the environment
- facilitating sustainable development

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## News story: UK creates world's first 3D winder for complex carbon fibre parts

Specialist machinery manufacturer [Cygnet Texkimp](#) and the [University of Manchester](#) have created a cutting-edge machine to support the next generation of fuel-efficient cars and aeroplanes.

The 3D Winder is the world's first robotic winding machine capable of laying carbon fibre to make complex, lightweight composite parts for industry.

It comes out of a 2-year Knowledge Transfer Partnership (KTP).

Luke Vardy, Managing Director of Cygnet Texkimp, said:

The 3D Winder revolutionises what the composites industry can achieve with winding. It offers benefits in terms of cost and speed of manufacture as well as the strength, uniformity and repeatability of the finished product.

There is nothing else like it on the market at the moment. It is the first machine of its kind.

# Turning research into reality

The 3D Winder builds on a prototype from the university's [School of Materials](#).

Through the KTP, the Northwich-based company brought in PhD graduate and composites academic, Dr Yan Liu, to develop this technology to work with more complex and curved shapes.

The resulting machine uses a technique called filament winding to create complex components such as fuel pipes and aircraft wing spars, which are the main structural members of the wing.

It does so cost-effectively, in high volumes and at high speeds. Trials have shown it to produce parts much quicker and to a higher integrity than traditional methods such as braiding and weaving. It has the potential to wind an aircraft wing spar in just a few minutes.

[Cygnnet Texkimp](#)

Reflecting on the KTP, Luke said:

Partnering with the university enabled us to carry out extensive research into advanced filament winding techniques.

It laid the groundwork for us to develop a new filament winding product stream more quickly than we otherwise would, to be first to market with an innovative new product.

Following the success of the partnership, Yan was offered a permanent role at Cygnnet Texkimp's R&D centre.

## The future is bright

Since the project ended, the 3D Winder has gone on to be recognised by industry. In 2017 it won the [Composites UK Trade Association's](#) innovation in composite manufacture award.

A production-scale version of the machine is now being used to carry out advanced trials with international part manufacturers, including one of the world's leading automotive wheel manufacturers. The very lightweight quality of composite components make the 3D Winder ideal for the aerospace and automotive sectors.

Luke continued:

We're on the threshold of a new generation of lightweight, fuel-efficient cars and aeroplanes. Demand for greater fuel efficiency and lower emissions is driving the need for better ways of producing and using intelligent materials such as carbon fibre

composites.

Our long-term objective is to see this technology adopted as a conventional way to produce composite parts throughout the world.

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## **Press release: Government's new planning rulebook to deliver more quality, well-designed homes**

Building attractive and better-designed homes in areas where they are needed is at the centre of new planning rules published by Secretary of State Rt Hon James Brokenshire MP today (24 July 2018).

The new rules will also make it easier for councils to challenge poor quality and unattractive development, and give communities a greater voice about how developments should look and feel.

The revised National Planning Policy Framework follows a public consultation launched by the Prime Minister earlier this year to provide a comprehensive approach for planners, developers and councils to build more homes, more quickly and in the places where people want to live.

The new rule book will focus on:

- promoting high quality design of new homes and places
- stronger protection for the environment
- building the right number of homes in the right places
- greater responsibility and accountability for housing delivery from councils and developers

Secretary of State for Communities, Rt Hon James Brokenshire MP said:

Fundamental to building the homes our country needs is ensuring that our planning system is fit for the future.

This revised planning framework sets out our vision of a planning system that delivers the homes we need. I am clear that quantity

must never compromise the quality of what is built, and this is reflected in the new rules.

We have listened to the tens of thousands of people who told us their views, making this a shared strategy for development in England.

Ministers have been clear on their ambition to achieve 300,000 new homes a year by the mid-2020s, which follows 217,000 homes built last year, the biggest increase in housing supply in England for almost a decade.

The new rules will see 85 of the proposals set out in the [housing white paper](#) and the Budget, implemented in the new National Planning Policy Framework.

Refocusing on the quality and design of proposals which are in line with what local communities want, the framework ensures councils have the confidence and tools to refuse permission for development that does not prioritise design quality and does not complement its surroundings.

With an emphasis on engaging with communities and allowing residents to see proposed development before it's even built, the new framework encourages councils to make use of innovative new visual tools to promote better design and quality, which will also make sure new homes fit in with their surroundings.

Adopted neighbourhood plans will demonstrate clear local leadership in design quality, with the framework allowing groups seeking such plans to truly reflect the community's expectations on how new development will visually contribute to their area.

Whilst the framework sets the strategic direction for driving up new build quality, it will remain up to councils to apply these policies in the most appropriate way in their area, recognising that they are well placed to know their area's unique character and setting.

To maximise the use of land we are promoting more effective use of the land available and giving councils more confidence to refuse applications that don't provide enough homes.

## **Stronger protection for the environment**

The new framework has also been updated to provide further protection for biodiversity; ensuring wildlife thrives at the same time as addressing the need for new homes.

Changes to the framework see the planning system align more closely with Defra's [25 Year Environment Plan](#), which aims to leave the environment in a better state for future generations. This includes more protection for habitats, and places greater importance on air quality when deciding development proposals.

It provides strengthened protection for ancient woodland and ancient and veteran trees across England, ensuring they can be retained for the benefit of future generations.

Whilst giving councils real flexibility to make the most of their existing brownfield land, the revised framework makes sure they exhaust all other reasonable options for development before looking to alter a Green Belt boundary.

The government has more explicitly outlined the protection of the Green Belt in England, explaining the high expectations and considerable evidence that would be needed to alter any boundary.

## **Building the right number of homes in the right places**

To help tackle unaffordable house prices in many areas across the country, the framework sets out a new way for councils to calculate the housing need of their local community (including different forms of housing, such as older people's retirement homes).

This new methodology aims to deliver more homes in the places where they are most needed, based on factors including the affordability of existing homes for people on lower and medium incomes.

## **Greater responsibility and accountability for housing delivery from councils and developers**

From November 2018 councils will have a [Housing Delivery Test](#) focused on driving up the numbers of homes actually delivered in their area, rather than how many are planned for.

In addition, to make sure that the necessary infrastructure and affordable housing is delivered to support communities, clearer guidance for both developers and councils will also be published today.

Meaning that developers will know what is expected of them up front, even before they submit a planning application and councils have greater power to hold them to these commitments.

## **Further information**

The publication of the National Planning Policy Framework follows the government's first Design Quality Conference held in London earlier this year, which demonstrated our commitment to engaging local government and industry to promote and deliver a step change in the design quality of new development.

See the final [National Planning Policy Framework](#) published today (24 July 2018).

During the consultation the government held 10 regional engagement events and approximately 40 individual meetings.

29,224 responses received to the [government's consultation](#) on the revised National Planning Policy Framework. This included over 25,000 campaign responses.

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## **News story: New competition: The Invisible Battlespace**

We are looking for ideas from the private sector and academia to help solve how UK Defence could take a radically different approach to conducting operations across or within the increasingly congested and contested electromagnetic environment.

This themed competition is focused on ideas on radio and microwave bands, offering £1 million available in phase 1 with additional funding of up to £1 million for phase 2.

This competition supports the [Contested Electromagnetic Environment Programme with Dstl](#) to develop new concepts in the electromagnetic environment to ensure the UK is prepared for future opportunities and threats. Innovative approaches are needed to ensure our Armed Forces and Security Services aren't disadvantaged as the electromagnetic environment becomes more cluttered and challenging; for example, with radio wave interference. The known reliance of many military systems on this spectrum makes it an attractive target for our adversaries.

If you are interested in this competition, please do visit the [competition summary document](#) and look out for the launch event this September. The full competition document will be released shortly.

If you have any queries on this competition, please do contact us ([accelerator@dstl.gov.uk](mailto:accelerator@dstl.gov.uk)) or [sign up for alerts](#) on our news pages.

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## **Press release: More than a million people still to need to renew their**

# tax credits

There's just one week to go to the 31 July tax credit renewal deadline and HMRC is urging over a million customers yet to renew to [do it online today](#) because this is the quickest and easiest way.

Angela MacDonald, Director General of Customer Services, said:

We've improved our services so customers can renew their tax credits at a time that's convenient to them but the 31 July deadline is fast approaching.

There is a wealth of support available at all times of the day and night from HMRC via GOV.UK, the app, or Alexa to help customers get their renewal right.

I urge customers who have yet to renew their tax credits to do so as soon as possible, to avoid their payments being stopped.

Tax credits help working families with targeted financial support. HMRC has made it easier than ever to renew and more than 59% of customers have renewed online or via the HMRC App. The most popular times of day to renew by phone are between 10am to 12pm and 4:30 to 6:30pm, but customers renew any time – day or night – through HMRC's online services.

This year, HMRC has also launched a customer-focused service via Amazon Alexa to help answer some of the most frequently asked questions about tax credits renewals. Customers with Amazon Alexa-enabled devices can ask Alexa to open HMRC and ask for direct links to information and renewals.

Last year 320,000 customers had their payments stopped or altered because they missed the deadline to inform HMRC of changes to their circumstances. These include changes to working hours, income and childcare costs. Online help and information on renewing tax credits is available GOV.UK and via HMRC's customer service Twitter feed [@HMRCcustomers](#). Support is also available via the [tax credits helpline](#).

Claimants can get help and information on renewing tax credits:

- on [GOV.UK](#)
- by tweeting [@HMRCcustomers](#) or posting on our [Facebook page](#) with general queries
- using HMRC's App, which is available on the App Store or Google Play Store
- using the HMRC service on Amazon Alexa
- using [our online forum](#) (click on Tax Credits and You)
- through HMRC's webchat help service
- by calling the tax credits helpline: 0345 300 3900

1. The deadline for people to renew their tax credits is 31 July 2018. Failure to renew before the deadline will mean payments are stopped and customers may have to repay the money they have received since April.
2. HMRC has developed a new customer-focused service via Amazon Alexa. Customers can request information about renewing tax credits. No personal information is stored on Alexa and customers cannot renew their tax credits using Alexa. If a customer requests further information via an SMS, the mobile phone number is stored for 6 hours and then automatically deleted.
3. Follow HMRC's Press Office on Twitter [@HMRCpressoffice](#)
4. HMRC's Flickr channel can be found [here](#)