Official Statistics: Energy Performance of Buildings Certificates in England and Wales: 2008 to September 2017

Information about certificates on the energy efficiency of domestic and non-domestic buildings in England and Wales that have been constructed, sold, or let since 2008, and of larger public authority buildings since 2008. These statistics do not cover the entire building stock across England and Wales.

Figures are drawn from 2 datasets on the Energy Performance of Buildings Registers:

- Energy Performance Certificates (EPCs) for domestic and non-domestic properties covering England and Wales
- Display Energy Certificates (DECs) for larger buildings occupied by public authorities in England and Wales.

Press release: Government to take action on Fixed Odds Betting Terminals

• Government also announces moves to ensure stronger protections around online gambling and a new industry-led responsible gambling advertising campaign

The maximum stakes on Fixed Odds Betting Terminals (FOBTs) will be reduced, Gambling Minister Tracey Crouch announced today as the government published its gambling review.

The government has launched a <u>consultation</u> on a range of options on cutting maximum stakes of B2 gaming machines, otherwise known as FOBTs, from £100 to between £50 and £2. We have also asked the <u>Gambling Commission</u> for more information about how better tracking and monitoring of play on FOBTs can help with interventions to protect players and also if spin speed on games such as roulette should be looked at.

This is to reduce the potential for large losses on the machines and the risk of harm to both the player and wider communities in which these machines are

located, such as the increased health costs associated with problem gambling.

In addition to the launch of a 12 week consultation on FOBTs, there will be a package of measures taking effect to strengthen protections around online gambling and gambling advertising to further minimise the risk to vulnerable people and children.

Gambling Minister Tracey Crouch said:

It is vital that we strike the right balance between socially responsible growth and protecting the most vulnerable, including children, from gambling-related harm.

Given the strong evidence and public concerns about the risks of high stakes gaming machines on the high street, we are convinced of the need for action. That is why today we have set out a package of proposals to ensure all consumers and wider communities are protected.

We have seen online gambling grow rapidly and we need to protect players in this space, while also making sure those experiencing harm relating to gambling receive the help they need.

The package of measures taking effect include:

- Raising standards of player protection for online gambling The Gambling Commission will consult on changes to the Licence Conditions and Codes of Practice next year, with the aim of raising standards on player protection online and will set out expectations to the industry around customer interaction online.
- Responsible gambling campaign GambleAware, Advertising Association, broadcasters and gambling industry groups will come together to draw up a major two year responsible gambling advertising campaign. The campaign will have a budget of £5 to £7 million per year and will include TV adverts, including around live sport, as well as radio, cinema, online and print. The campaign will be funded by gambling operators, including online-only betting firms, with airspace and digital media provided by broadcasters.
- New advertising guidelines This will be drawn up by the Committees of Advertising Practice (CAP) to help protect those at risk of problem gambling and children and young people by ensuring that the content of gambling adverts does not encourage impulsive or socially irresponsible gambling.
- Strengthening the code on responsible gambling advertising The

Industry Group for Responsible Gambling (IGRG) are strengthening the code on responsible gambling advertising to require operators to ensure gambling content and channels cannot be accessed by under-18s via social media

 Responsible gambling initiatives — Gambling operators should step up on funding for research, education and treatment. If not, government will consider other options, including introducing a mandatory levy on gambling operators.

Regarding the stakes and prizes of other gaming machines, the government is recommending maintaining current stakes, apart from on prize bingo gaming where the government is content with industry proposals to increase takes from £1 to £2 and prizes from £70 to £100.

This follows the Government's <u>call for evidence</u> launched in October 2016, that looked at the gambling landscape, including the number and location of gaming machines in licensed premises and the social responsibility measures in place to protect players and communities from gambling-related harm.

For further information contact: DCMS Press Office on: 020 7211 2210

The consultation will close on 23 January 2018, following which government will consider its final proposals.

Research and analysis: Working with natural processes to reduce flood risk

Updated: The Evidence Directory report was updated in February 2018. The alterations include updates to the wording in Figure 1.3, additional references to literature on fluvial audits, and greater cross-reference to the Brackenhurst case study.

Working with Natural Processes (WWNP) to reduce flood and coastal erosion risk (FCRM) involves implementing measures that help to protect, restore and emulate the natural functions of catchments, floodplains, rivers and the coast. WWNP takes many different forms and can be applied in urban and rural areas, and on rivers, estuaries and coasts.

There has been much research on WWNP, but it has never been synthesised into one location. This has meant that it has been hard for flood risk managers to access up-to-date information on WWNP measures and to understand their potential benefits.

The outputs can be used by those planning projects which include WWNP measures to help understand:

- their potential FCRM benefits and multiple benefits
- any gaps in knowledge
- where it has been done before and any lessons learnt
- where in a catchment they might be most effective

Press release: Spooky science at Dstl

Understanding the bizarre behaviour of quantum particles is challenging but offers many marvellous and mysterious uses that could benefit us all. At the Defence Science and Technology Laboratory (Dstl), physicists are focusing on quantum technology for navigation and sensing.

Working with experts from UK industry and academia, Dstl is developing deployable devices that will be used to see through walls, around corners and underground. For example, the gravity imager uses cold atom technology to detect minute changes in density caused by spaces such as tunnels or rooms, and create a ghostly picture of the hidden world. For the military, this can detect and map hidden areas, but it could also be used more widely to find, for example, sink holes and buried pipes.

Chris, a physicist in Dstl's Future Sensing Technology team, said:

Quantum-enhanced sensors can detect gravity changes at a very fine scale. We're working with industry and academia to shrink the size, weight and power of systems, moving from lab-based prototypes to deployable devices. Crucially, these devices retain the ability to perform measurements to a remarkable level of precision.

We're also developing mathematical tools to make use of the information that these sensors gather. In the case of the gravity imager, we can go from a collection of individual gravity observations to a three-dimensional image of what the subterranean world looks like.

Dstl has already helped Thales create a system that can see, image and identity multiple moving targets at range around corners using quantum photonic technology. The exquisite precision of the technology means it could, in theory, be used to diagnose medical disorders and detect density anomalies without any invasive procedures.

Quantum can also protect us against otherworldly phenomena. Space weather events can interfere with the global navigation satellite system (GNSS) — which includes GPS \neg — and potentially wreak havoc on our daily lives. A

recent government report estimates that five days without GNSS would cost the UK economy £5.2 billion. Quantum-based systems for position, navigation and timing would not be affected. Such systems would also be safe from intentional jamming and spoofing.

Chris added:

As well as the gravity imager, we're working on quantum clocks and accelerometers for ultra-precise timing and navigation. GNSS relies on a strong signal between satellites and receiver; whenever this connection is lost or degraded, for example if you're inside a building or tunnel, the uncertainty in your position grows. Quantum sensors bypass this issue by taking local measurements of motion. The potential applications extend beyond military use; for example first responders could have a navigation system to help in a collapsed building.

At Dstl, we do a lot of our work with the National Physical Laboratory, Birmingham University and Imperial College ensuring UK defence and security benefits from this cutting-edge technology. Glasgow, Strathclyde, Oxford and many other universities are also working with us on future novel quantum sensing technologies.

Dstl has run three successful summer schools for PhD students researching quantum technology. The courses have given students an awareness of military applications and systems engineering, as well as commercial and business skills, to help them think about real-world uses of their research and empower them to contribute to the future UK quantum landscape after they have concluded their current research.

Watch the video to find out more about quantum physics.

What is quantum physics?

<u>Press release: Secretary of State for Northern Ireland statement on talks</u>

James Brokenshire provides an update on the political situation in Northern Ireland.

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

"The parties have made further progress during the course of today. They are making certain additional requests of the UK Government which we need to

consider.

"In the light of this, I believe it is right to defer the assessment on whether to introduce legislation to Parliament this week to enable an Executive to be formed. The parties will recommence talks in the morning and I will reassess the position tomorrow night."