News story: Tech of tomorrow offers more convenient, carbon-friendly living

From schemes that promote cleaner, greener travel to online deliveries straight to your car boot — these are some of the innovative ideas being trialled in Innovate UK's first of a kind deployment competition.

With more than 70% of people estimated to be living in urban areas by 2040, city infrastructure and design requires a drastic change in order to support a high quality of life.

Each of the projects is designed to enable a step change in innovation that will make a real difference to the energy, transport and urban infrastructure of the future. In total, 12 projects will share £18 million to develop their ideas.

The ideas

Projects are exploring the potential to:

- take the flexibility of click and collect even further by delivering orders straight to the consumer's car boot. This project — by <u>Car Tap</u> uses new reliable and secure keyless vehicle access technology. The trial will enable 100 customers of <u>Farmaround</u> to receive deliveries of organic boxes
- address the problem of disposing used batteries one of the areas of the <u>Industrial Strategy</u> Challenge Fund — by exploring how old Nissan electric vehicle batteries can be used to store peak electricity from UK homes. There will be a 50 unit, 12-month trial led by <u>Powervault</u>. Partners include Nissan, Aston University, Hyde Housing, Lyra Electronics, M&S Energy and Solarcentury
- ease congestion and problems with parking by operating a virtual loading bay. Commercial vehicle operators will be able to pay to reserve kerb space to load or unload. <u>Transport for London Road Network</u> (TLRN) is running the trial in Wandsworth, focusing on high-density loading 'hotspots'
- convert electricity into hydrogen at a mass scale to create affordable, green energy for the transport sector. The trial by <u>ITM Power</u> will provide energy balancing and refuelling for a fleet of 20 fuel cell buses in Birmingham
- encourage the adoption and use of electric vehicles by making charging even easier. ZAPINAMO is an easily deployable, rapid charging system. It is trialling 2 solutions:
 - \circ rapid charging for up to 20 taxis at once at Heathrow Airport, making it easier to park and charge and improving air quality
 - o a mobile charger to serve 4 Europear E-Car Club electric vehicles,

which comes directly to you as and when you need it

A full list of projects can be found in our list of <u>funding competition</u> winners 2017.

Funding from Innovate UK

The projects are part of a £19 million investment by Innovate UK that invited businesses to test and evaluate new infrastructure technologies in the real world.

This is the second phase of the competition. All of the projects completed a finance and business case in the first phase. Those selected for phase 2 will now demonstrate their innovations in a commercial environment.

Read about the <u>background to the competition</u>.

Learn more about our work in <u>infrastructure systems</u>.

Apply for an innovation funding award.

Press release: New £10 million fund to restore peatland

A £10 million grant scheme to restore England's iconic peatlands has been launched by the Government today.

Peatlands cover 11 per cent of England's landscape and provide a fantastic habitat for a wide range of birds such as the merlin, dunlin and golden plover.

They also provide 70 per cent of our drinking water and reduce greenhouse gases by locking away at least 3.2 billion tonnes of CO2.

The £10 million will be available for wildlife trust and charity projects to re-wet mosses, bring back missing plants and restore a thriving habitat to our peatlands across the country. This is in addition to the £4 million Defra has already allocated to existing Natural England peatland restoration schemes in England.

Environment Minister Thérèse Coffey said:

Peatlands are an iconic aspect of the English landscape which are

not only a haven for wildlife but also provide us with clean water and help reduce greenhouse emissions.

This funding will help restore thousands of hectares of this precious habitat to its natural state and is a key part of our ambition to be the first generation to leave the natural environment in a better state than we found it.

Natural England Chairman Andrew Sells said:

Peatlands are one of the most important resources in England for wildlife and people. They are our answer to tropical rainforests, storing hundreds of thousands of tonnes of carbon a year, providing clean drinking water, beautiful landscapes and valuable wildlife habitats, as well as reducing the risk of flooding.

This investment will support practical restoration initiatives such as rewetting and seeding with Sphagnum mosses, an essential ingredient in restoring our peatlands for future generations.

In addition to this, plants and animals unique to this habitat, including the white-faced darter dragonfly and round-leaved sundew, will be better protected for years to come.

The funding will be available for projects that restore upland and lowland peatlands to their natural state, increasing their capacity to prevent carbon entering the atmosphere, reduce flood risk by slowing the flow of rain water and create habitats for vulnerable wildlife.

The scheme will open in May and funding will target sites with the greatest potential for greenhouse gas reduction. Projects that deliver better value for money and maximise environmental benefits will be favoured for funding.

Funding will be available for three years from April 2018 as part of Defra's £100 million of capital funding for direct investment in projects that support the natural environment. More details, including how to bid for grants, will be provided when the scheme opens for bids.

Press release: John Millen jailed for

8 months for illegal waste operation

The operator of a waste site in Sittingbourne, Kent has been imprisoned for 8 months for the illegal disposal, sorting and treatment of construction demolition waste.

John Millen, 50, trading as K.M. Millen Grab Hire, received the custodial sentence today (Wednesday 12 April) at Maidstone Crown Court after pleading quilty to using the Gas Road site for illegal waste transfer activities.

The Environment Agency brought charges against Mr Millen following an investigation in December 2014 which established over 40,000 tonnes of waste had been illegally deposited on the site.

Mr Millen was subsequently provided with clear guidance on the action he was required to take and an Enforcement Notice to clear the waste from the site by the end of March 2015 was issued. However, after the three months had expired it was clear that none of the waste had been removed and he continued to crush, treat and deposit waste.

The activities being undertaken by Mr Millen were in clear breach of environmental legislation and would have required an Environmental Permit. Mr Millen did not apply for an appropriate Environmental Permit and continued to operate, avoiding significant costs to his business.

Alan Cansdale, Environment Manager at the Environment Agency said:

Mr Millen was fully aware that he was not allowed to store that amount of waste on the site, but continued to accept more construction and demolition waste whilst ignoring the advice and guidance issued to him by Environment Agency Officers. His actions put the environment at risk.

Waste crime can undermine legitimate businesses, so we work closely with businesses to help them comply with the law. In cases like this, where illegal operations are connected to licensed businesses, we have no hesitation in prosecuting those involved. We want to make sure that waste crime doesn't pay.

Whilst passing sentence, Judge St. John-Stevens said that Mr Millen was the "controlling mind of the business" and he ignored all advice offered from the Environment Agency regarding his business operations

Press release: Waste scam now sees Boston targeted

This time a Boston farmer faces the cleanup bill for 250 tonnes of waste after being approached and asked if he wanted tarmac road planings that can be used to repair roads and farmyards on their land.

The Environment Agency issued a <u>warning last week</u> after 2 farmers in the Grantham area suffered the same fate, with one of them facing an estimated bill of £300,000 to dispose of the waste after they found baled rubbish on their land instead of the promised tarmac road plannings.

In the recent Boston case, a neighbour made the farmer aware of the scam warnings issued last week after the initial 250 tonnes of waste were left, and this ensured that no further waste was dumped on the site.

The Environment Agency is urging all landowners to be wary and not become the next victim of illegal waste disposal and dumping.

Advice from the Environment Agency includes:

- use reputable agents and brokers
- carry out suitable checks and due diligence, i.e. get the individuals details, vehicle registration, ask where the waste is coming from (address, permit number, waste carriers registration)
- inform them you'll be contacting the Environment Agency or call us whilst they are there
- don't agree to accept any waste until you have carried out some checks and had a cooling off period to fully consider the offer

Peter Stark, Senior Enforcement Officer, said:

Waste criminals can be very convincing and persuasive, sometimes offering £1000s in cash up front. Don't be tempted by quick money because you could end up with not only a massive disposal bill but also harm to the environment, flies, polluting liquids running out of bales of waste and increased risk of fire.

We will investigate the illegal waste incidents fully and take enforcement action where necessary. The recent case shows that farmers in the region are particularly at risk of this scam.

However, the landowners may have to pay significant sums to remove the waste legally. Waste crime is a serious issue diverting as much as £1 billion per annum from legitimate businesses and Treasury.

Although these specific incidents occurred in Lincolnshire, we want landowners and farmers everywhere to be vigilant.

The Environment Agency provides impartial advice to customers, individuals and businesses to help them grow. Our local officers will be happy to talk to you, can make public register checks whilst you are on the phone or you can make checks on the <u>GOV.UK website</u> for free, or you can call the Environment Agency's customer contact centre on 03708 506 506.

The Highways Agency and county council's highways department and their contractors will always use legitimate waste carriers and sites for the reuse or disposal of waste. They may approach farmers and landowners to see if they want to reuse tarmac road planings or crushed rubble and concrete to repair road and yard areas, but farmers need to register the <u>U1 waste exemption</u> with the Environment Agency and abide by the rules.

The vast majority of waste sites that the Environment Agency regulate are well run and provide essential waste management services. The Environment Agency are there to help the legitimate businesses.

Waste stored inappropriately can create issues for neighbours like smells and pests. It can also have a detrimental effect on the environment and impact on rivers and streams. There is a high risk of waste fires due to the waste not being stored in the correct manner.

Everybody has a part to play to help solve the waste crime problem and make sure waste is managed responsibly. If you see or suspect illegal waste activities, report it anonymously to Crimestoppers or call 0800 555 111.

Research and analysis: Public dialogue on geological disposal and working with communities

The department commissioned a public dialogue to inform the open policy making process in the area of community involvement in the siting of a Geological Disposal Facility (GDF).

The project was jointly funded by the Department of Energy and Climate Change (DECC) and Sciencewise as a mechanism for exploring the views of small groups of members of the public on key policy issues relating to the geological disposal of radioactive waste.

The public dialogue project was run by 3KQ and the evaluation report was prepared by URSUS Consulting Ltd.