# Solar, high speed and wifi charging set to revolutionise electric transport

- twelve projects set to receive almost £40 million to revolutionise the experience of owning an electric vehicle in the UK
- innovations to receive investment include solar-powered forecourts, underground charging systems and electric vehicle wireless charging systems
- government aims for these innovations to encourage uptake of electric vehicles — a key aim of the Road to Zero strategy which celebrates oneyear anniversary

Today (9 July 2019), the government announced it is investing £37 million into British engineering to transform electric chargepoint infrastructure, revolutionising the experience for the record levels of ultra-low emission vehicle drivers on UK roads.

Twelve projects are set to receive a share of the funding, to support the creation of innovations including wireless charging technologies, meaning electric vehicles of the future could charge without the need to plug in a cable.

The news comes on the one-year anniversary of the government's <u>Road to Zero strategy</u>, which has driven a 60% increase in battery electric vehicle registrations this year compared to the same period in 2018.

Future of Mobility Minister, Michael Ellis, said:

We're charging up the transport revolution and investing in technologies to transform the experience for electric vehicle drivers.

Ensuring the charging infrastructure for electric vehicles is reliable and innovative is encouraging more people to join the record numbers of ultra-low emission vehicle users already on UK roads.

The Road to Zero strategy sets out new measures to clean up road transport and lead the world in developing, manufacturing and using zero emission road vehicles. Through funding these projects, the government is incentivising drivers to move towards buying electric vehicles, supporting the key aims of the strategy.

Urban Foresight, a smart city consultancy, has been awarded over £3 million to roll out 'pop-up' chargers which are built into the pavement and provide a

discreet, safe and low-cost charging solution for electric vehicle drivers without access to off-street parking.

Further projects to receive funding include:

- a renovation project, installing chargepoints in car parks to allow for mass charging at night
- a project leveraging existing Virgin Media physical and online infrastructure to deliver cost-effective and widespread charging, using high speed internet connections to better share information online on charging progress and parking spaces
- a cutting edge storage and advanced electronics project that will deliver semi-rapid charging using a low power grid connection minimising the need for costly substation upgrades

Char.gy, an electric charging company, has been awarded over £2.3 million and will use the funding to develop deploy wireless charging technology on residential streets without the need for trailing cables and additional infrastructure.

Initial 3 month feasibility studies have been completed and successful projects are moving onto the next stage of development.

Richard Stobart, CEO of Char.gy, said:

Our consortium is delighted to be funded by Innovate UK to demonstrate induction charging on residential streets in Milton Keynes, the London Borough of Redbridge and Buckinghamshire County. Working in collaboration with the Open University and The University of Warwick's WMG we are excited to show that our ability to retrofit to existing electric vehicles and enable several parking bays per lamp column without the need for cables will accelerate the uptake of electric vehicles.

Keith Johnston, co-founder of Urban Electric, said:

On behalf of the 'Clean Streets' consortium we are delighted to be a winner in the Innovate UK Electric Vehicle Charging For Public Spaces competition. Together with our partners Urban Foresight, Cowheels, Duku and Appy parking we look forward to demonstrating Urban Electric's pop-up charging hubs in Dundee and Plymouth and to bringing residential on-street charging for the 50% of people that park on-street at night in cities one step closer to reality.

The announcement is another milestone for the government's <u>Future of Mobility Grand Challenge</u>, which aims to tap into the extraordinary innovation across the country in order to make every day journeys greener, safer, easier and more reliable.

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From September 2019, boys in school year 8 will be offered the free Human Papilloma Virus (HPV) vaccine for the first time.

Worldwide, about 5% of all cancers are linked to the HPV virus. This includes cervical, penile, anal and genital cancers and some cancers of the head and neck — all of which the vaccine helps to protect against. Cervical cancer is currently the most common cancer in women under 35, killing around 850 women each year. HPV is thought to be responsible for over 99% of cervical cancers, as well as 90% of anal, about 70% of vaginal and vulvar cancers and more than 60% of penile cancers.

Modelling produced by the University of Warwick estimates that by 2058 in the UK the HPV vaccine currently being used may have prevented up to 64,138 HPV-related cervical cancers and 49,649 other HPV-related cancers. This would be 50 years after the introduction of the HPV vaccination programme, when people

who were vaccinated as teenagers have reached the age groups that they would typically be affected by HPV-related cancers.

Head of Immunisation at Public Health England (PHE) Dr Mary Ramsay said:

This universal programme offers us the opportunity to make HPV-related diseases a thing of the past and build on the success of the girls' programme.

Offering the vaccine to boys will not only protect them but will also prevent more cases of HPV-related cancers in girls and reduce the overall burden of these cancers in both men and women in the future.

I encourage all parents of eligible boys and girls to make sure they take up the offer for this potentially life-saving vaccine.

It's important not to delay vaccination, as the vaccine may be less effective as adolescents get older.

Public Health Minister Seema Kennedy said:

The success of the HPV vaccine programme for girls is clear and by extending it to boys we will go a step further to help us prevent more cases of HPV-related cancer every year.

Through our world-leading vaccination programme, we have already saved millions of lives and prevented countless cases of terrible diseases. Experts predict that we could be on our way toward eliminating cervical cancer for good.

Programmes like this are at the heart of our work to help people live longer, healthier lives through the NHS Long Term Plan and I would encourage everyone who is eligible to take up this potentially life-saving vaccine.

National Cancer Director at NHS England Cally Palmer said:

By extending the HPV vaccine to boys, the NHS is taking an important step forward in our fight to prevent cancer — more people will be better protected, and the vaccine could help to eliminate cervical cancer in this country.

Cancer survival is now at an all-time high, and the NHS Long Term Plan will save even more lives through enhanced screening and early diagnosis programmes to catch cancers sooner when they can be treated best.

Girls have been offered the human papilloma virus (HPV) vaccine free from the NHS since 2008. So far, 10 million doses of HPV vaccine have been given to young women in this country meaning over 80% of women aged 15 to 24 have received the vaccine.

Since the introduction of HPV vaccination, infections of some types of HPV (HPV 16/18) in 16 to 21 year old women have reduced by 86% in England. A Scottish study also showed that the vaccine has reduced pre-cancerous cervical disease in women by up to 71%. Similarly, diagnoses of genital warts have declined by 90% in 15 to 17 year old girls and 70% in 15 to 17 year old boys due to the HPV vaccine.

Parents of girls and boys aged 12 and 13 should look out for information from their children's school about the vaccine and timings for the jab. If they miss out on the vaccination for any reason they should talk to their school nurse or immunisation team about getting the vaccine at a later date.

More information about HPV vaccination for <u>parents and their children is</u> <u>available online</u>.

#### HPV vaccine

The first dose of the HPV vaccine will be offered to boys and girls aged 12 and 13 in year 8. The second dose can be given anytime between 6 to 24 months after. Two doses are needed to be fully protected.

Girls and boys who have their first vaccination after the age of 15 will need to have 3 doses.

Older boys (those currently aged 13 to 18) will not be offered the vaccine on a 'catch-up' basis.

The human papilloma virus (HPV) vaccine currently used in the NHS vaccination programme is called Gardasil. Prior to September 2012, a vaccine called Cervarix was used.

Studies have already shown that the vaccine protects against HPV infection for at least 10 years, although experts expect protection to last for much longer and may be lifelong.

Extensive reviews of HPV vaccine safety have been undertaken by various independent health bodies/authorities worldwide including the EMA, CDC, WHO and the Commission on Human Medicines (CHM). These have concluded that the HPV vaccine is safe and effective.

#### **HPV**

Human papilloma virus (HPV) is the name for a group of viruses that affect your skin and the moist membranes lining your body. Examples of this include your cervix, anus or mouth and throat.

There are more than 100 types of HPV. Around 40 types of HPV infection can affect the genital area.

Genital HPV infections are common and highly contagious. They're spread during sexual activity.

Infection with some types of genital HPV can cause:

- genital warts the most common viral sexually transmitted infection (STI) in England
- abnormal tissue growth and other changes to cells within the cervix — this can sometimes lead to cervical cancer

HPV can also cause a number of different types of cancers, such as:

- anal cancer
- cancer of the penis
- some types of head and neck cancer

Other types of HPV infection can cause minor problems, such as warts and verrucas.

#### **HPV-related cancers prevented estimates**

The estimates produced by the University of Warwick are based on a comparison between there being no HPV vaccination programme and the girls programme starting in 2008 with the addition of boys in 2017.

All estimates are based on the use of the bivalent (2 strains of HPV) for the first 4 years of the programme and then the quadrivalent (4 strains of HPV) vaccine for the whole period (2008 to 2058).

The estimates provided are the total reductions in cancer from 2008 to 2058 in the UK due to vaccination and breakdown as follows:

#### Girls

- cervical cancer 64,138
- anal cancer 6,874
- vulva cancer 4,138
- vaginal cancer 959
- oropharyngeal cancer 8,681

#### Boys

- anal cancer 4,124
- penile cancer 3,433
- oropharyngeal cancer 21,395
- PHE press office: National Infection Service

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### National Democracy Week 2019

This year's National Democracy Week will kick off on Monday 14th October 2019. The week is being led by Democratic Engagement Champions, organisations across the UK who are passionate about democratic engagement.

National Democracy Week is the perfect opportunity to raise awareness of what democracy means, and how we can encourage more people to take part.

Whether you're hosting a single event or a whole programme of activities, we have one shared goal:

Regardless of who we are or where we are from, we must work together to ensure that every member of society has an equal chance to participate in our democracy and to have their say.

If you have any questions about National Democracy Week please contact nationaldemocracyweek@cabinetoffice.gov.uk.

Back to <u>National Democracy Week homepage</u>.

### <u>Chinooks to stay in Mali to help in</u> <u>fight against violent extremism</u>

Three Chinook helicopters and almost 100 service personnel have been deployed to the French-led operation in Mali since 2018. On a visit to Northwood Headquarters in North London, the Prime Minster announced that UK forces would be staying in the region.

The UK's helicopters bring a unique logistical capability to the operation,

allowing French ground forces to operate more effectively across the Sahel including in Niger and Burkina Faso. French forces, with UK support, are leading the fight against violent extremism in a region where militants linked to Al-Qa'ida and Islamic State pose a constant threat.

Defence Secretary Penny Mordaunt said:

Increasing instability across the Sahel is causing pain and suffering to local communities and posing a real threat to European security.

It is right that we extend our commitment to the counter-terror operation in Mali, Burkina Faso and Niger. By providing essential support to our French partners our Armed Forces are helping to build stability and deny terrorists a haven from which to plan attacks.

The UK is increasing its engagement across the region to address the long-term drivers of poverty and instability. This involves setting up new embassies, expanding our development programme and supporting security interventions in the region. As well as boosting stability and prosperity, this supports international efforts to counter illegal migration through and from the Sahel.