

Climate emergency comes to Epsom

30 March 2026



A community screening of a national climate film is set to take place in Epsom next month, bringing together residents, councillors and community groups to explore what the climate and nature crisis means locally.

The event, hosted by St Martin's Church and Sustainable Epsom and Ewell, will feature *The People's Emergency Briefing*, a 45-minute film based on a high-level national briefing delivered in Westminster last year.

Organisers say the screening forms part of a UK-wide programme designed to make complex information about climate and environmental risks more accessible at a local level, with community discussions encouraged after each showing.

Local screening details

The Epsom event will take place on Saturday 11 April at St Martin's Church, Church Street, starting at 3pm (doors open 2.30pm). Entry is free, although attendees are asked to register in advance so organisers can plan capacity.

Invitations have been extended to local councillors, community leaders and Epsom and Ewell's MP, alongside residents interested in environmental issues.

From Westminster briefing to community film

The film is based on a landmark briefing held in November 2025 at Westminster Central Hall, attended by more than 1,200 MPs, peers and leaders from across business, culture, faith and media.

Experts at the event examined the implications of climate and nature breakdown across areas such as food security, health, infrastructure and the economy, alongside practical evidence on how risks might be reduced.

That material has now been adapted into a public-facing film, launching nationally in April 2026, with screenings planned in venues ranging from churches and village halls to libraries and schools.

A "civic event" as well as a film

Organisers emphasise that the screenings are intended not just as film showings but as civic events, encouraging discussion about local impacts and responses.

Each event is expected to include a facilitated discussion, allowing residents to reflect on how national risks relate to their own communities.

The wider programme has backing from organisations including WWF, the National Trust, CPRE and the Royal Meteorological Society, with hundreds of screenings anticipated across the country.

Broadcaster Chris Packham, who opened the original Westminster briefing, said: "I'd encourage people everywhere to attend a screening... It creates exactly the kind of honest local conversation we now urgently need."

Local focus

For Epsom and Ewell, the event offers a chance to connect global environmental challenges with local concerns, from green space and biodiversity to resilience and community preparedness.

Organisers say they hope the screening will help spark informed, constructive discussion about how the borough can respond to the issues raised.

Sam Jones - Reporter



[Event Listing Details Here](#)



Box Hill's Zig Zag Road Leads to Straight Ban on Antisocial Riding

30 March 2026



Motorcyclists near Box Hill are being targeted despite the “vast majority” who visit the Surrey beauty spot being “considerate people who behave respectfully”. A Public Spaces Protection Order is being introduced around the National Trust site following efforts from residents in Mickleham and Westhumble over what they said was excessive noise and acts of anti-social behaviour. Mole Valley District Council then carried out consultation on whether to make certain behaviour an offence within the defined area.

This includes, revving engines, keeping engines idling, speeding, stunts, driving in a convoy, exhaust popping or backfiring, racing, for sudden or rapid acceleration. The area covered includes the world famous Zig Zag road and the roundabout near Denbies wine estate.

The decision was taken by the council’s March executive committee after 603 people, 62 per cent of those who took part in the consultation, backed the measures – compared with 29 per cent who were against and nine per cent who were undecided. It will remain in place for three years unless renewed with the council estimating it will come into effect this summer once necessary signage is installed.

Councillor Caroline Joseph (Liberal Democrat: Fetcham) said: “The consultation revealed a polarised view about whether a PSPO should be introduced ranging from citing behaviour that it disrupts residents’ lives and threatening safety to viewing it as unenforceable and being harmful to local businesses and long-standing biker traditions. “Motorcycle riding at Boxhill and the surrounding area dates back to at least the 1920s from early racing and trials, and the Surrey Hills area remains a popular destination. “It is important to recognise that the vast majority of motorcyclists in this area are considerate people who behave respectfully.”

Bike groups are concerned it will impact their long-standing enjoyment of the area and groups. She added: “It’s not aimed at spoiling those traditions but it’s meant to encourage less antisocial behaviour by those who don’t respect the traditional activity of bikers in the area. “The purpose of the order is only to prohibit the behaviours that cause a public nuisance.” “The introduction of the PSPO will benefit visitors to the local area and those residents and businesses whose quality of life has been affected by vehicle noise all while not affecting responsible and considerate drivers and riders who use Mole Valley’s roads.” The council said it was open to extending the order’s coverage but would require further consultation – which would need to be done outside the upcoming election period.

Chris Caulfield LDRS

Zig Zag Road (image Google)

Surrey University designs new long-life battery

30 March 2026



A new battery design that could significantly extend the range of electric vehicles and the lifespan of portable electronics has been developed by researchers at the University of Surrey’s Advanced Technology Institute (ATI).

In a study published in ACS Applied Energy Materials, researchers introduce a novel lithium-ion battery anode that delivers some of the highest energy storage capacities reported for silicon-carbon nanotube systems, while maintaining stability over hundreds of charge cycles.

Lithium-ion batteries power much of modern technology - from smartphones and wearables to electric vehicles. Graphite, the most commonly used anode material, is stable but limited in the amount of energy it can store. Silicon, on the other hand, offers far greater capacity, but it expands during charging, causing it to crack and degrade over time.

To overcome this, the research team developed a new “Vertically Integrated Silicon-Carbon Nanotube” (VISiCNT) structure. The design grows dense forests of carbon nanotubes directly onto copper foil and coats them with a thin layer of silicon, creating a flexible, conductive scaffold that can absorb expansion while maintaining performance.

The resulting anode can store a very large amount of energy for its weight. In laboratory tests, it stored more than 3500 milliampere-hours per gram - close to the maximum possible for silicon and far higher than the graphite (370 mAh/g) used in today’s batteries. It also demonstrated improved stability and performance over repeated charge cycles.

Dr Muhammad Ahmad, Research Fellow at the University of Surrey’s ATI and lead author of the study, said:

“There’s been a growing push for battery innovation, as many of today’s technologies are limited by how much energy batteries can store. Our VISiCNT design offers a practical route to harness silicon’s huge storage capability without sacrificing cycle life.

“This is a much-needed breakthrough, delivering very high capacity, fast charging and long-term durability, while bringing us closer to batteries that can power electric vehicles and everyday devices for much longer on a single charge.”

A key advantage of the new approach is that the carbon nanotubes are grown directly onto copper - the material already used in commercial batteries - using a scalable manufacturing process. This could make it easier to integrate the technology into existing industrial production lines.

Professor Ravi Silva, Principal Investigator and Director of the ATI, said:

“This work is an important step towards bringing CNT-silicon anodes out of the lab and into real-world manufacturing. We can grow carbon nanotube structures directly onto copper foil at speed and tailor the silicon layer for stability, meaning this approach could be integrated into existing battery production lines with minimal disruption. The technology has clear potential not just for electric vehicles, but also for grid storage and smaller batteries used in microelectronics.

“We are very proud to present yet another CNT technology following our initial research in delivering the world’s darkest material, VANTA-Black via the university spin-out Surrey NanoSystems Ltd., which is showing real-world impact of fundamental research funded by UKRI.”

As demand for energy storage grows, batteries will need to store more energy, charge faster and last longer to support the UK’s transition to Net Zero. The VISiCNT design offers a promising route to meeting these challenges and could be key to powering next-generation electric vehicles and phones.

Surrey University



Related reports:

[Surrey battery leads](#)

[Surrey Uni leads microbe recycling of lithium batteries](#)

Rare moth rediscovery secures conservation status for Epsom’s Manor Open Space

30 March 2026



Manor Open Space in Epsom has been designated a Site of Nature Conservation Importance (SNCI), recognising its ecological value and role in supporting wildlife across the borough.

The designation, made by the Surrey Local Sites Partnership, highlights several important features of the site, including

veteran oak trees and the presence of the extremely rare moth *Coleophora conspicuella* (Knapweed Case-bearer). The species had not been recorded in Surrey for around 100 years before its rediscovery at the site in 2024.

The open space also plays a key role as a wildlife corridor, linking Epsom Common and Horton Country Park local nature reserves. This connection enables the movement of species between habitats and strengthens the borough’s wider ecological network.

SNCIs, also known as Sites of Importance for Nature Conservation or Local Wildlife Sites, are non-statutory designations that identify areas of high biodiversity value. While not legally protected in themselves, they are recognised in planning and conservation decisions and help safeguard important habitats and species at a local level.

Cllr **Liz Frost** (RA Woodcote and Langley), Chair of the Environment Committee, said the designation reflected both the ecological importance of the site and the work of those maintaining it.

“We are proud that Manor Open Space has been recognised for the important role it plays in supporting resilient ecosystems across the borough,” she said. “Through our Biodiversity Action Plan, we can protect our natural heritage, and the presence of veteran oak trees along with the discovery of extremely rare moth species reflects the dedication of everyone involved in caring for our habitats.

“This SNCI designation is a testament to the hard work, diligence and passion of our Countryside team, partners and much valued volunteers who continually strive to improve our green spaces for the benefit of our community. Their commitment ensures that these habitats will be enjoyed for many years to come.”

The Surrey Local Sites Partnership, which oversees the selection of SNCIs, brings together Surrey County Council, Surrey Wildlife Trust, district and borough councils and independent ecological experts under the Surrey Nature Partnership. The group identifies and manages both nature conservation sites and Regionally Important Geological Sites across the county.

Epsom & Ewell Borough Council’s Biodiversity Action Plan aims to protect, maintain and enhance biodiversity locally, taking into account priorities at regional, national and international levels. This work sits alongside the council’s Climate Change Action Plan 2025-2029, which sets out measures to reduce emissions and promote environmental sustainability across the borough.

Sam Jones - Reporter



Photo: Manor-Open-Space-springtime-Cuckoo-Flower-in-the-foreground

Ewell school goes safe streets ahead

30 March 2026



Danetree Primary School in Ewell is set to benefit from a School Street from May 2026, aimed at reducing air pollution and improving road safety during the busiest times of the day.

Danetree Road, Danetree Close, Oakhurst Road and a portion of Chessington Road will be open to pedestrians, cyclists and wheelers only between 8:00am and 9:00am and 2.30pm to 3.45pm, Monday to Friday during school term time. Exemptions will apply for residents, carers, school transport and blue badge holders accessing the school.

The move follows the successful rollout of the county’s first School Street at Farnham Heath End School in April 2025, where there has already been a 62 per cent reduction in cars entering and exiting the road. In the week before the scheme was introduced, 1,227 vehicles were recorded turning in or out of Bullers Road at school drop-off and pick-up

times, compared to 470 once the scheme was in place.

Potters Gate Church of England Primary School in Farnham was the second school to benefit from the School Streets programme.

Matt Furniss, Cabinet Member for Highways, Transport and Economic Growth, said: “By restricting motor vehicle access during peak times of the day, we can create safer, healthier and more pleasant environments for everyone walking, cycling and scooting to school. I’m delighted with the positive results we have already seen in Farnham and am pleased we are able to roll the scheme out further. School Streets are a key part of our overall programme to improve road safety, promote more sustainable school travel and reduce air pollution around schools. We’re investing £3m to improve road safety and encourage more walking, cycling and wheeling. We’re also continuing to deliver Feet First walking training and Bikeability cycling training to provide lifelong road safety skills for Surrey’s school children.”

For more information about School Streets in Surrey, visit the county council’s website.

Surrey County Council



Photo: Danetree Road. Danetree Road, West Ewell, just outside of Danetree Junior School Tony Grant. Licence details

New moped bays introduced to tackle pavement parking in Epsom High Street

30 March 2026



Epsom & Ewell Borough Council have established new moped-only parking spaces outside the Town Hall in a bid to combat pavement parking on Epsom High Street.

The issue of delivery riders mounting kerbs outside fast-food restaurants has been a cause of significant concern for residents and visitors in recent years. Vehicles blocking pavements create serious safety risks for pedestrians, particularly wheelchair users, those with visual impairments, and parents with prams and pushchairs.

The bays are the latest measure in the council’s multi-agency approach to the problem. Motions have been successfully passed at both Epsom & Ewell Borough Council and Surrey County Council calling for dedicated motorcycle parking at all new retail and takeaway developments, the introduction of “round-table” discussions with delivery apps such as Uber Eats and Deliveroo, and stronger enforcement of parking regulations.

The Epsom Business Improvement District (Go Epsom) is also working directly with restaurants and delivery riders to promote the use of these dedicated bays as a faster and legal alternative to pavement parking.

The local initiative coincides with a significant national policy shift. On 8 January 2026, the Department for Transport responded to a long-awaited consultation, announcing new powers for local authorities to tackle pavement parking more effectively.

Unlike the previous street-by-street approach, which was often slow and costly to implement, the new secondary legislation will allow councils to enforce against “unnecessary obstruction” more easily.

Councillor **Steven McCormick**, (RA Woodcote and Langley) Chair of the Planning Committee and a member of Surrey County Council’s Communities, Environment and Highways Select Committee, said:

“Pavements are for people, not for motorised shortcuts. We’ve heard from residents who have been forced into the road because the footway is entirely blocked. We are committed to making the High Street safe for everyone. The new moped bays that Epsom & Ewell have provided will mean there is no longer any excuse for this unacceptable and inconsiderate parking.”

“I also welcome the announcement of new powers from the Department for Transport. As soon as this national legislation is fully enacted, I will be pushing Surrey County Council to implement a new Traffic Regulation Order specifically designed to curb pavement parking across the borough.

“This TRO will provide the ‘teeth’ that enforcement officers have lacked, allowing them to issue civil penalties.”

Epsom and Ewell Borough Council



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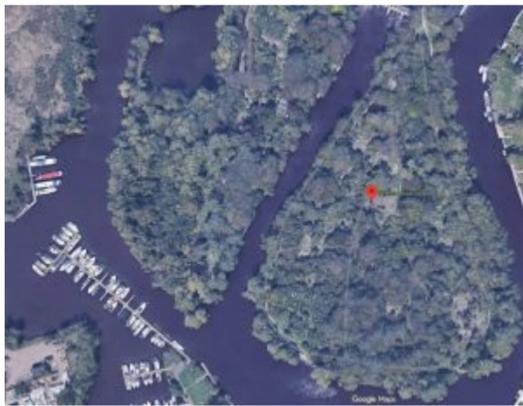
Pavement Parking: Epsom & Ewell MP Speaks Out

Epsom High St in need of more love?

Bikes that blight the blind

Ash dieback keeps Thames island closed

30 March 2026



The Environment Agency has warned against any planned protests over the closure of a Surrey riverside island and announced a public engagement event to update residents on safety work there.

Penton Hook Island has been shut since July 2025 after diseased trees were discovered across the site. Officials say the trees are affected by ash dieback, a disease that rots them from the inside and makes them unstable and unpredictable to cut down. As a result of the scale and complexity of the work required the island cannot safely reopen yet, officials said.

The agency has warned people not to attempt to access the island amid reports of possible protests around the site. A spokesperson said: "We would like to remind everyone that access to the island is currently prohibited due to the significant safety concerns resulting from diseased trees. Please do not attempt to access the island."

Ash dieback weakens trees internally, meaning they can collapse or drop branches without warning. The Environment Agency said this creates a serious risk to both workers and the public, with falling branches, collapsing trunks and debris on the ground posing a potential injury hazard.

Local residents will have a chance to discuss the plans at a public engagement event on March 20, 2026, at Staines Library between 2pm and 5pm.

Environment Agency staff will provide an update on the work and hear feedback from the community. People will also be able to share information about memorials located on the island so they can be protected where it is safe to do so.

A spokesperson added: "Keeping the public safe is one of our priorities and we apologise for any inconvenience this closure may be causing. We know the importance of this site to the local community, and we are committed to keeping everyone updated on our progress."

Instead of using standard chainsaws, specialist mechanical equipment will be needed to remove the affected trees, the Environment Agency said. The machinery will have to be transported to the island by river, adding further logistical challenges.

The agency said additional work will also be required to strengthen parts of the island bank before equipment can be brought in.

Seasonal wildlife restrictions are another factor. The bird nesting season, which runs from March to September, limits when some work can take place, further complicating the project.

Plans are also being explored to restore the island once the dangerous trees have been cleared. Environment Agency officials said they hope to replace the diseased trees with new species better suited to the island's ecology.

Emily Dalton LDRS

Penton Hook Island - Google Maps



Battle of the skies above Surrey

30 March 2026



Air pollution, noise, and climate change are three of the reasons Surrey Heath Borough Council is objecting to plans to increase weekend flights at Farnborough Airport. The business travel hub has a cap on weekends and is looking to increase that as part of a wider push to get to 50,000 annual flights. The airport has also seen an increase in demand despite only 2.6 people travelling per flight, the February planning committee heard.

The application, part of a neighbouring authority consultation, wants to increase weekend and bank holiday flights from its current limit of 8,900 to 13,500. As it stands there are about 30,000 flights using the airport, which sits 1.5km from the border of Surrey Heath, but it has a limit of 50,000 a year. If the application is approved by neighbouring Rushmoor Borough Council, airport chiefs expect it to reach its capacity by 2033. If it is rejected, that pushes the target date back to 2045.

Officers told the meeting: “The climate change manager has raised doubts about whether projections, which rely on the suggested level of uptake, are sufficiently robust. The council therefore raises objections on the noise, but also on the potential impact on air pollution, potential impact on biodiversity, potential impact on climate change, and that the economic benefits to this borough do not outweigh the harm.”

Councillor David Whitcroft (Liberal Democrat; Mytchett and Deepcut) said the airport was currently turning away weekend flights and felt the weekend slots would be used primarily for wealthy leisure travellers - with the borough paying for the impact. The meeting heard that about 70 per cent of aeroplanes landing at the airport come in over the borough, and that it misses out on any direct economic benefits. He said: “The current level is 8900, and that level has been met. So if this application were to go through, the weekend impact on residents particularly in Mytchett, Deepcut and Bisley would be immediate and dramatic. Weekend flights would go up by 50 per cent. Why does it need to go up on weekends for a business airport designed to relieve traffic from the bigger airports, because it has seen an increase in leisure travel. Should people be able to avoid what they consider to be the inconvenience of mass commercial flying in order to create noise and air pollution simply because they can afford it.”

The plans were universally objected to by all members. The final decision rests with Rushmoor Borough Council at a yet-to-be-set date.

Chris Caulfield LDRS Farnborough Airport (image SHBC)

Fly-tipping “running out of control” but major incidents disappear in Epsom and Ewell

30 March 2026



Fly-tipping on an industrial scale is at risk of “running out of control” across England, with organised criminal gangs blamed for dumping tens of thousands of tonnes of rubbish in the countryside and urban areas.

Latest government figures show 52,000 large-scale fly-tipping incidents — involving at least a tipper-lorry load — were recorded by councils in England in 2024-25, up sharply from 31,000 before the pandemic.

Campaigners say the crime has become highly organised, lucrative and relatively low-risk for offenders.

A spokesperson for the Chartered Institute of Waste Management said: “Waste crime is at risk of running out of control across the UK. It is evident that waste crime at all levels continues to cause misery and anxiety for local communities and causes real damage to local environments and local economies. These are crooks and cowboy operators, often organised

criminal gangs, deliberately profiting from other's misery, from polluting our environment and exploiting loopholes in the system."

The Countryside Alliance said: "Fly-tipping is not just an environmental nuisance — it has become a serious and organised crime issue and rural communities are on the frontline... For them it is low-risk and highly profitable... contributing to a criminal market worth an estimated £1 billion a year."

Epsom and Ewell large-scale incidents fall to zero

Figures analysed by the Epsom and Ewell Times show a striking local trend.

Epsom and Ewell recorded 30 large fly-tipping incidents in 2019-20, falling to 19 in 2020-21 and 14 in 2021-22. Since then, none have been recorded, with zero incidents reported in 2022-23, 2023-24 and 2024-25.

This suggests large-scale dumping in the borough has been eliminated — at least in the official statistics — contrasting with rising national totals.

However, smaller fly-tipping incidents, which make up the majority of cases, are recorded separately and remain a persistent issue across the country.

Who deals with fly-tipping locally

Responsibility for tackling fly-tipping is shared between councils and national regulators.

Epsom and Ewell Borough Council is responsible for clearing illegally dumped waste on public land in the borough, investigating incidents and prosecuting offenders. The Council can also issue fixed penalty notices.

The Environment Agency deals with larger, organised or hazardous waste crime, including illegal waste sites operated by criminal gangs.

Private landowners are responsible for removing waste dumped on their own land, though authorities may investigate and prosecute those responsible.

Tough penalties available — but few offenders caught

Fly-tipping is a criminal offence carrying severe penalties. Courts can impose unlimited fines and prison sentences of up to five years. Vehicles used in dumping can be seized and destroyed, and offenders receive a criminal record.

Councils can also issue fixed penalty notices of up to £1,000.

However, enforcement remains limited. Nationally, only 663 fines exceeding £1,000 have been issued since 2019.

One recent major case saw a prolific offender ordered to pay more than £1.2 million following an Environment Agency investigation.

Criminal gangs and fake waste firms driving problem

Experts say organised crime is increasingly behind large-scale fly-tipping. Criminals often pose as legitimate waste clearance companies, charging households and businesses before dumping waste illegally to avoid disposal costs.

The illegal waste market is estimated to be worth around £1 billion a year.

Local improvement but national concern remains

The disappearance of major fly-tipping incidents in Epsom and Ewell will be welcome news locally. But nationally the problem remains serious, with experts warning illegal dumping continues to expand and new sites regularly appearing.

Residents are urged to use only licensed waste carriers and report fly-tipping to their local council.

Those caught face potentially severe consequences — though many offenders still escape justice.

Sam Jones - Reporter



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[Fly-tipping in Epsom and Ewell part of national problem](#)

[Illegal dumps dump a dumps in Surrey](#)

Image: Fly-tipping in countryside. Pixabay free

EV charger grants increased as thousands of Surrey drivers without driveways could benefit

30 March 2026



Renters, flat-owners and businesses in Surrey will be able to claim up to £500 towards installing electric vehicle (EV) chargers from April, after the Government increased grants by more than 40% in a bid to accelerate the switch away from petrol and diesel cars.

The Department for Transport says the higher payments could cover almost half the cost of installing a home or workplace charge point, potentially allowing motorists to power their car for as little as 2p per mile using domestic electricity tariffs.

The scheme is particularly relevant to areas such as Epsom and Ewell, where many residents live in flats or terraced housing without private driveways, and where on-street parking remains common.

Up to £500 per charger from April

From 1 April 2026, households in rented accommodation, flat owners, landlords, and businesses will be able to receive grants of up to £500 per charge point, increased from the previous £350 limit. Schools will be eligible for up to £2,000 per socket.

The Government says the grants will run until March 2027 and are intended to remove one of the main barriers to EV ownership — access to convenient and affordable charging at home.

A parallel £25 million scheme is also helping councils install pavement cable channels so residents without driveways can safely connect home chargers across the pavement.

Running cost savings of £1,400 a year claimed

The Department for Transport claims drivers can save up to £1,400 a year in running costs compared with petrol cars if they charge at home on cheaper tariffs. Ministers say more than 55,000 motorists have already received discounts of up to £3,750 off the purchase price of new electric cars through a separate grant scheme.

Nationally, the UK public charging network has expanded rapidly to around 88,500 public charge points, with £600 million allocated to help councils install tens of thousands more.

Transport minister Keir Mather said: “We’re taking action to make EV ownership the affordable choice for everyone — not just those with driveways. Bigger grants mean families, flat owners, renters and small businesses can now install a charger for almost half the usual cost.”

Surrey already seeing rapid EV growth

Surrey has one of the highest rates of electric vehicle ownership in the country, reflecting its relatively high average incomes and commuter population. Department for Transport data shows EV registrations nationally now account for around one in five new car sales, compared with fewer than one in 100 just a decade ago.

However, lack of home charging remains a key obstacle. National surveys show more than half of small businesses say improved charging access would encourage them to switch to electric vehicles.

Local authorities, including Surrey County Council and borough councils such as Epsom and Ewell, are expected to receive further funding over the next three years to expand public charging infrastructure.

Landlords and businesses encouraged to act

The National Residential Landlords Association said almost nine in ten landlords would install charge points if tenants requested them, while the Federation of Small Businesses said improving infrastructure was key to helping firms cut fuel costs and emissions.

The Government has also simplified its charging support schemes, reducing eight different grants to five to make them easier to access.

Ministers say the measures are part of wider plans to prepare for the phase-out of new petrol and diesel car sales, currently scheduled for 2035.

Sam Jones - Reporter



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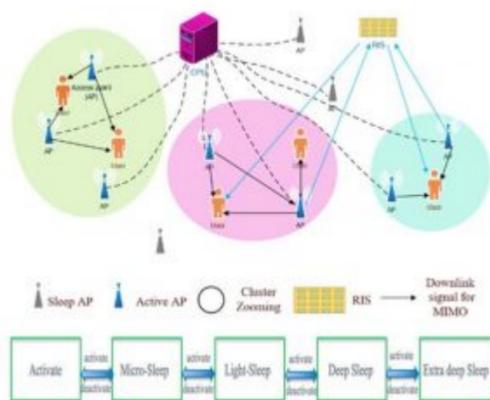
Let's go Electric Epsom and Ewell

Council driving forward with electric chargers

Image: Electric Vehicle Charging Point. Ranjithsiji. Creative Commons Attribution-Share Alike 4.0 International license

Surrey Uni finds energy-saving 5G features could cut carbon emissions

30 March 2026



An optimal combination of energy-efficient 5G network features - including AI systems that let mobile mast and antenna base stations go into sleep mode when usage is low, and phones that avoid unnecessary background network checks - could help cut indirect carbon emissions across the UK economy by around 25 million tonnes of CO₂, suggests new research from the University of Surrey.

The study, published in *Resources, Conservation and Recycling*, challenges the assumption that 5G will inevitably increase the UK's energy demand. Instead, researchers show that next-generation network technologies have the potential to reduce emissions across many industries that rely on the digital infrastructure that keeps them online - from finance and IT to transport and construction.

Using UK economic and emissions data, the team established an environmentally extended input-output (EEIO) model tailored specifically to the Information and Communication Technology (ICT) sector. This allowed them to trace how cutting energy use in 5G can send knock-on effects across 33 industries of the UK economy.

Working in collaboration with Professor Ming Xu from Tsinghua University, researchers looked at 10 emerging technologies - six targeting how base stations operate and four designed to make user devices more energy-efficient. These included AI-driven multi-level sleep modes, which let mobile masts switch off when demand is low, reconfigurable intelligent surfaces (RIS) such as smart panels that redirect radio waves using little power, "cluster-zooming" in cell-free MIMO networks that allow groups of small antennas to expand or shrink coverage so energy is not wasted, and smarter handset signalling.

They found that AI-powered sleep control for base stations and improved control-channel signalling on user devices delivered the most impactful reductions.

Dr Lirong Liu, Associate Professor at Surrey's Centre for Environment and Sustainability, said:

"Smarter base stations and devices don't just cut electricity use in telecoms - they reduce indirect emissions in the whole supply chain. The modelling framework allowed us to quantify effects that are usually hidden, especially the indirect emissions linked to electricity use and wider supply chains. It also gave us a clear way to compare different 5G features side by side and identify which combinations deliver the strongest environmental benefits."

The analysis shows that sectors such as financial services, IT services and computer programming gain some of the largest indirect benefits, reflecting just how much modern industries depend on digital connectivity.

Professor Pei Xiao, Professor of Wireless Communications at Surrey's Institute for Communication Systems, said:

"Many of these energy-efficient features are already on the engineering roadmap. What this study provides is a clear system-level view of where the biggest carbon wins lie - and why regulators, operators and industry should prioritise them as part of the UK's net zero transition."

The research also suggests that to unlock these benefits, 5G policy must extend beyond coverage and speed targets and encourage the adoption of energy-efficient architectures. Measures could include building energy targets into spectrum

licenses that mobile operators need to use 5G frequencies, incentives for low-power network design and making sure 5G research supports the UK's broader net zero goals.

Surrey University



The full paper can be found here: <https://www.sciencedirect.com/science/article/abs/pii/S0921344925005774?via%3Dihub>

Image from Resources, Conservation and Recycling

Old trains rolled back into service

30 March 2026



Old style 1980s rolling stock that had been taken out of service to much fanfare, including a huge ticket-only retirement party, are still being used to cover shortages across South Western Railways services.

The train operator made a big song and dance about the retirement of its old iconic Class 455 trains, even charging £45 a ticket for its supposed last ever journey - with the money going to charity.

The LDRS understands old rolling stock is still being used to cover shortfall when the new trains are unable to get off the blocks, notably on the Hampton Court to Waterloo route.

In December last year some 9,000 enthusiasts tried to buy tickets for the 400 spaces on the celebrated final service from Waterloo. Demand was so high a second train was put on. The day was supposed to mark the last rides of the Class 455 as they were finally phased out and replaced with modern Class 701 Arterio - the ones with the odd half table ledges.

Thousands gathered to say their goodbyes to the 'iconic' SWR trains that have, and continue, to serve Surrey for decades. The ceremony for the 'red train' involved a nine-hour round trip from Waterloo across the SWR network.

South Western Railways celebrated with a story titled 'Train enthusiasts bid farewell to iconic red trains after almost 43 years of service' - except they are still in service. Among the passengers was social media train fan Francis Bourgeois.

South Western trains said the December 'farewell' event was to celebrate the life of the Class 455, first introduced in the 1980s ahead of their removal from timetabled services and that it was always planned to keep some of them back as a contingency.

A spokesperson for SWR said: "The Class 455 fleet of trains was withdrawn from our timetable at the end of 2025. A small number were retained for resilience purposes, to cover any eventuality that may affect the trains we use on our suburban network."

Chris Caulfield LDRS

The 17.54 from Hampton Court to London Waterloo on Thursday January 29 was the old retired train brought back into service (LDRS)