

New prisons to be 'net zero' in future

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Plan to be equally effective at cutting carbon emissions and crime

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As the government works towards tackling climate change with the aim of becoming net-zero by 2050, four new prisons being built in England will include heat pumps, efficient lighting systems and thousands of solar panels.

The plan is to reduce energy demand by half and cut carbon emissions by at least 85% compared with prisons already under construction.

The first of the four new prisons will be built next to HMP Full Sutton in East Yorkshire. The prison buildings will use new technology and modern methods of construction that produce as much (or more) energy than they consume. An all-electric design will eliminate the need for gas boilers, meaning they will **produce net-zero emissions** when the National Grid decarbonises. During construction, 40,000 tonnes of carbon will be conserved by using recycled concrete and steel.

This is expected to reduce CO2 emissions by 280,000 tonnes, cutting £100 million in energy costs over the next 60 years.

The new designs will build on the construction of HMP Five Wells in Northamptonshire and HMP Glen Parva in Leicestershire. Both are being constructed more sustainably than existing prisons by using recycled materials and incorporating green energy.

The UK became the first major economy in the world to pass laws to end its contribution to global warming by 2050. The target will require the UK to bring all greenhouse gas emissions to net-zero by 2050, compared with the previous target of at least an 80% reduction from 1990 levels.

Existing prisons are also benefiting from a £15 million investment to cut their emissions. Solar panels are being installed at a further 16 sites to meet 20% of their power demand, bringing the total number of solar panels across the estate to over 20,000. More than 200 electric vehicle charging points are also being installed across 40 prisons.

The developments are part of the government's £4 billion programme to create 18,000 additional modern prison places that boost rehabilitation and cut reoffending.

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