

Kier completes UK's first all-electric prison, HMP Millsike in North Yorkshire, for the Ministry of Justice

10 months ago



Kier has delivered the new HMP Millsike for the Ministry of Justice, increasing prison capacity by around 1500.

The prison was officially opened by Lord Chancellor and Secretary of State for Justice, Rt. Hon Shabana Mahmood MP, and Minister of State for Prisons, Probation and Reducing Reoffending, Lord Timpson OBE.

The leading contractor utilised its extensive experience within the justice sector to provide a high-specification, safe and secure facility that is focused on reducing reoffending and creating a safe working environment for staff.

HMP Millsike is a Category C prison and has a capacity of around 1500. It is the UK's first all-electric prison and is the first prison in the UK that has been delivered as part of an alliance, The Alliance 4 New Prisons (A4NP). The Ministry of Justice will deliver 20,000 new prison places overall, with the A4NP delivering 6000 of those. Building on the work Kier did at HMP Five Wells, this model allows the members of the alliance to focus on repeatability and continuous improvement to drive better performance in capital delivery and lifecycle costs.

HMP Millsike runs solely on electricity, making it the first of its kind in the UK, with more than 8,500kwh of renewable energy being generated to power it. Solar panels, heat pump technology and more efficient lighting systems mean that it will use approximately a quarter of the energy used to heat traditional Victorian prisons.

In building HMP Millsike, Kier has also left a lasting legacy in the local community. Through its [Making Ground](#) programme, 40 prison leavers have been trained, upskilled and reskilled. Employment opportunities have been provided for 29 prison leavers and a further 44 prisoners released on temporary licence (ROTL). 85% of prisoners who worked on HMP Millsike were employed at the six weeks post release mark.

Almost 800 jobs were created for local residents within 50 miles of the site and 92 apprentices and trainees were employed. Kier invested significantly in the local economy, with a local spend of 45% within 50 miles of the site.

The team on the ground worked with over 1,300 school children locally, engaging them in educational initiatives and encouraging students into careers in construction via apprenticeships and further education opportunities.

Kier's Strategic Projects team worked collaboratively with in-house mechanical, electrical, and plumbing (MEP) experts to manage the vast and complex MEP installations.

Innovative digital processes and programmes were used to deliver HMP Millsike, including OpenBIM and digital standardisation. Led by Kier, the digital construction process provided a trackable and accurate build process throughout delivery – from design and manufacture through to installation. Digital platform, Ynomia, was used to generate a 3D digital twin to visualise every component, ensuring the use and performance of each one was monitored in real time during the build, saving considerable time and money.

Stuart Togwell, group managing director at Kier Construction, said: "Using our significant experience in the justice sector, Kier has delivered a state-of-the-art, carbon-efficient facility designed to support rehabilitation, which has also provided new jobs, economic investment and skills development for the surrounding communities.

"HMP Millsike supports the Government's commitment to increasing prison capacity and reducing reoffending, and joins our growing portfolio of prison redevelopment and build projects awarded in recent years."

Rt. Hon Shabana Mahmood MP, Lord Chancellor and Secretary of State for Justice, said: "HMP Millsike sets the standard for the jails of the future, with cutting crime built into its very fabric. It is a huge step in our plan to add 14,000 extra prison places by 2031.

"But building jails only takes us so far in ending this crisis, which is why we're also reviewing sentencing so we can always lock up dangerous offenders and make our streets safer."

Kier has extensive experience delivering justice projects, including the multi award-winning [HMP Five Wells](#) in Wellingborough, utilising an innovative houseblock design that was manufactured off-site, which was also replicated at HMP Millsike. Kier has recently been appointed to build the new [HMP Glasgow](#), set to replace HMP Barlinnie.

HMP Millsike was procured via the Crown Commercial Services – Construction Works and Associated Services framework.