# Silvertown Tunnel’s sustainable design wins two ICE London Awards amid health concerns



The Silvertown Tunnel, which officially opened in April 2025, represents a significant advancement in addressing longstanding congestion and air pollution challenges caused by the ageing Blackwall Tunnel, built over 125 years ago. Situated beneath the River Thames, this 1.45 km twin-bore tunnel connects Silvertown with North Greenwich and was designed with a strong emphasis on sustainability and community benefit. It features two lanes in each direction, including a dedicated lane for double-decker buses, coaches, and heavy goods vehicles, alongside improved pedestrian and cyclist facilities.

The tunnel’s construction showcased an innovative approach to environmental responsibility by transporting approximately 1.7 million tonnes of materials via barges on the River Thames. This strategy substantially reduced the reliance on lorry transport, cutting down greenhouse gas emissions significantly and improving road safety in the surrounding areas. Earlier reports highlighted that this method removed thousands of lorries from London's roads—estimates suggest tens of thousands of lorries were avoided during the project's material transport phase, which also contributed to a reduction in construction-related congestion and emissions.

The project also embraced the United Nations Sustainable Development Goals (SDGs) in several ways. It enhanced bus connectivity by increasing the number of zero-emission bus routes, notably expanding the frequency of cross-river bus services from six to 21 per hour upon opening. For East London commuters, this meant not only reduced journey times but also access to cleaner public transport options, which were free to use for the first year. Additionally, the tunnel provided opportunities for apprenticeships and employment for unemployed individuals, aligning with SDG 8 on decent work and economic growth.

These multifaceted sustainable and social efforts led to the Silvertown Tunnel being honoured at the ICE London Awards 2025 with two prestigious accolades: Best Large Infrastructure Project (for projects costing over £5 million) and Best Team of the Year. The judges praised the project’s comprehensive approach, which combined innovative engineering—using the UK’s largest diameter tunnel boring machine—with challenges posed by the COVID-19 pandemic, Brexit, and inflation.

While the project is celebrated for its environmental and social advancements, it is important to note that some community concerns were voiced during its development. Health professionals warned that the tunnel might exacerbate air pollution levels in already affected local areas by potentially increasing traffic volumes. These concerns highlight the ongoing debate between infrastructural development and environmental health in urban settings.

Complementing the Silvertown Tunnel’s achievements, other London infrastructure projects received recognition at the ICE London Awards for their contributions to sustainability and community wellbeing. The Cox’s Walk Footbridge refurbishment was honoured for improving public green space through environmentally sympathetic material use in a smaller-scale project. The Sutton Estate regeneration project was celebrated for transforming one of the country’s oldest social housing estates into modern, sustainable homes while upgrading drainage systems. Additionally, the Thames Tideway Tunnel, London’s ‘super sewer’, won the Best Project – Sustainability Award for its role in dramatically improving water quality by intercepting millions of tonnes of sewage pollution since its inception.

The ICE London Awards, held this year at One Great George Street in Westminster, continue to spotlight the innovative and impactful engineering work shaping the city. Sponsored by notable industry players, these awards not only celebrate structural and technological achievement but also the people behind the projects, recognising leaders in mentorship and STEM outreach who contribute to fostering the next generation of engineers.

In sum, the Silvertown Tunnel stands as a landmark example of how large infrastructure projects can integrate cutting-edge engineering with environmental sustainability and social responsibility, despite the complexities and challenges inherent in major urban development.

### 📌 Reference Map:

* Paragraph 1 – [[1]](https://www.ice.org.uk/news-views-insights/latest-news/ice-london-awards-2025-winners), [[2]](https://www.ice.org.uk/what-is-civil-engineering/infrastructure-projects/silvertown-tunnel), [[4]](https://haveyoursay.tfl.gov.uk/tc-yourview/faqs)
* Paragraph 2 – [[1]](https://www.ice.org.uk/news-views-insights/latest-news/ice-london-awards-2025-winners), [[3]](https://www.newcivilengineer.com/latest/the-sustainable-solutions-being-implemented-by-silvertown-tunnel-team-13-12-2021/), [[5]](https://logistics.org.uk/logistics-magazine-portal/logistics-magazine-features-listing/auto-restrict-folder/15-09-22/tunnelling-underway-for-new-river-crossing-at-silv)
* Paragraph 3 – [[1]](https://www.ice.org.uk/news-views-insights/latest-news/ice-london-awards-2025-winners), [[6]](https://tfl.gov.uk/info-for/media/press-releases/2025/april/boost-to-cross-river-public-transport-and-journey-times-improved-as-new-silvertown-tunnel-opens)
* Paragraph 4 – [[1]](https://www.ice.org.uk/news-views-insights/latest-news/ice-london-awards-2025-winners), [[7]](https://www.theguardian.com/uk-news/2021/jan/20/silvertown-tunnel-assault-health-locals-warn-doctors-london)
* Paragraph 5 – [[1]](https://www.ice.org.uk/news-views-insights/latest-news/ice-london-awards-2025-winners)
* Paragraph 6 – [[1]](https://www.ice.org.uk/news-views-insights/latest-news/ice-london-awards-2025-winners)
* Paragraph 7 – [[1]](https://www.ice.org.uk/news-views-insights/latest-news/ice-london-awards-2025-winners), [[2]](https://www.ice.org.uk/what-is-civil-engineering/infrastructure-projects/silvertown-tunnel), [[3]](https://www.newcivilengineer.com/latest/the-sustainable-solutions-being-implemented-by-silvertown-tunnel-team-13-12-2021/)

Source: [Noah Wire Services](https://www.noahwire.com)

## Bibliography

1. <https://www.ice.org.uk/news-views-insights/latest-news/ice-london-awards-2025-winners> - Please view link - unable to able to access data
2. <https://www.ice.org.uk/what-is-civil-engineering/infrastructure-projects/silvertown-tunnel> - The Silvertown Tunnel, opened on 7 April 2025, is a 1.45 km twin-bore tunnel beneath the River Thames, connecting Silvertown with North Greenwich. Designed to alleviate congestion, especially at the Blackwall Tunnel, it features two lanes in each direction, including a dedicated lane for double-decker buses, coaches, and heavy goods vehicles. The project also introduced new zero-emission bus routes and improved pedestrian and cyclist facilities, aiming to enhance cross-river public transport and reduce traffic-related emissions.
3. <https://www.newcivilengineer.com/latest/the-sustainable-solutions-being-implemented-by-silvertown-tunnel-team-13-12-2021/> - In December 2021, Transport for London (TfL) revealed sustainable construction solutions for the Silvertown Tunnel project. Notably, over 120,000 tonnes of waste and materials were transported via barges along the River Thames, equivalent to removing 6,750 lorry loads from the road network. This approach aimed to reduce construction traffic and associated emissions, highlighting the project's commitment to environmental sustainability.
4. <https://haveyoursay.tfl.gov.uk/tc-yourview/faqs> - The Silvertown Tunnel project addresses the inadequacies of the existing Blackwall Tunnel, which, designed over 125 years ago, causes significant congestion and air pollution. The new tunnel aims to reduce these issues by providing a modern crossing, thereby improving journey times and air quality. Additionally, the project includes a network of zero-emission buses to enhance cross-river public transport options.
5. <https://logistics.org.uk/logistics-magazine-portal/logistics-magazine-features-listing/auto-restrict-folder/15-09-22/tunnelling-underway-for-new-river-crossing-at-silv> - As of September 2022, the Silvertown Tunnel project had excavated nearly 600,000 tonnes of material, with plans to remove all excavated materials via barges along the River Thames. This strategy aimed to minimize construction traffic and associated emissions, with over 150 barges already used to transport materials, removing at least 18,000 lorries from the road.
6. <https://tfl.gov.uk/info-for/media/press-releases/2025/april/boost-to-cross-river-public-transport-and-journey-times-improved-as-new-silvertown-tunnel-opens> - Upon its opening in April 2025, the Silvertown Tunnel increased the number of cross-river buses from six to 21 per hour, all zero-emission at the tailpipe and free to use for the first year. This expansion aimed to enhance public transport options and reduce congestion in East London, providing faster and more reliable journeys for commuters.
7. <https://www.theguardian.com/uk-news/2021/jan/20/silvertown-tunnel-assault-health-locals-warn-doctors-london> - In January 2021, a group of 25 healthcare professionals expressed concerns that the Silvertown Tunnel project could negatively impact the health of local residents. They argued that the tunnel might funnel more traffic through already polluted areas, leading to increased air pollution and associated health risks for families in the surrounding communities.