



PURE

Power Up a REnewable Society

OSLO, NORWAY

Emissions domains addressed by the Pilot Activity



Consumption of electricity generated for buildings, facilities & infrastructure



All vehicles & transport (mobile energy)

Key Terms

Zero-emission construction (ZEMCON) | Heavy-duty vehicles | Grid capacity | Energy flexibility | Peak load management | Cross-sector collaboration | National platform

Levers of Change

Financing and funding | Governance and policy | Learning and capabilities | Technology/infrastructure

Description of the Pilot Activity

Oslo has committed to a 95% reduction in emissions by 2030 — but existing policies get the city only to 70%. The remaining gap depends on electrifying construction sites, heavy-duty vehicles, and harbour operations. The constraint is not ambition but grid capacity: no significant new capacity is expected before 2030. PURE asks how Oslo can electrify faster than the grid can grow — through better energy management, flexibility, demand-side coordination, and cross-sector collaboration. The project produces practical guidelines for zero-emission construction (ZEMCON) and heavy-duty vehicle (HDV) charging, convenes a national industry platform, and distills lessons into EU policy recommendations.

Year One Highlights

Oslo's Year 1 was marked by a deliberate strategy of building national infrastructure around the pilot — creating platforms, guidelines, and evidence bases designed to outlast the project and scale its impact beyond the city. Hafslund Recharge produced and published comprehensive guidelines for zero-emission construction sites (ZEMCON), covering planning, technical specifications, and operational practices. Oslo made the knowledge freely available to industry — generating demand and positioning the city as a reference for others pursuing the same transition. SINTEF reviewed 200 publications on ZEMCON and heavy-duty vehicles from Oslo, Europe, and globally, with 57 included in a state-of-the-art evidence review underpinning project recommendations. SINTEF is also quantifying GHG savings and energy demands from over 220 construction sites that have implemented emission-free measures across eight municipal departments — building the evidence base for scaling requirements city-wide and beyond.

Three national stakeholder forums were established under the name Fagforum bygg og anlegg. An Energy Conference held in April 2025 — featuring the Minister of Energy and Oslo's Governing Mayor — delivered the Energy Transition Roadmap a full year ahead of schedule, bringing high-level political visibility to the project at a critical moment. Bellona Europa engaged EU policy development through the Big Buyers Working Together network.

Innovation Highlights

The open publication of the ZEMCON guidelines: by making knowledge freely available, Oslo accelerates industry uptake and establishes itself as the reference point for zero-emission construction — creating more leverage than proprietary advantage would. The Fagforum bygg og anlegg is scaling infrastructure, not a project event: a national platform for the construction and heavy transport sectors to coordinate, share knowledge, and prepare for requirements that Oslo expects to go national. Delivering the Energy Transition Roadmap, with ministerial and mayoral presence, converted a technical deliverable into a political moment.

