



PROJECT - 08

COPENHILL / AMAGER BAKKE

Waste-to-Energy Plant & Public Recreation Infrastructure

Adaptive Reuse **Biodiversity Integration**

Architects:

WOHA Architects

Location:

Copenhagen, Denmark

Area:

~41,000 m²

Year of Completion

2019

08

CopenHill / Amager Bakke by BIG – Bjarke Ingels Group is a globally influential project that transforms industrial infrastructure into a public environmental and recreational landmark. Located in Copenhagen, the project combines a **state-of-the-art waste-to-energy plant with public amenities** including a ski slope, hiking trails, climbing walls, and landscaped recreational spaces.

The project redefines how cities can integrate infrastructure into public life by turning a traditionally **hidden industrial facility into an accessible civic destination**. Rather than separating utility and urban experience, CopenHill merges environmental performance, recreation, and architecture into a single multifunctional ecosystem.





The project's environmental strategies extend beyond energy production. **Green roofs, landscaped pathways, and planted areas contribute to biodiversity** and stormwater management while improving microclimatic conditions. The integration of public recreation with infrastructure also strengthens public awareness of waste management and sustainable resource systems.



CopenHill demonstrates how infrastructure can support both environmental and social sustainability. By making energy production visible and publicly accessible, the project encourages greater civic engagement with sustainability and circular economy principles. Public amenities transform the facility into a community asset rather than an isolated industrial zone.



Human experience is central to the design. Hiking trails, observation points, fitness routes, and recreational zones activate the building throughout the year, encouraging physical activity, social interaction, and urban engagement. The climbing wall — one of the tallest in the world — further reinforces the project's hybrid identity as both utility infrastructure and public destination.



The project also highlights the importance of compact and multifunctional urban development. By stacking recreation, ecology, and industrial processes within a single footprint, CopenHill maximizes land efficiency while creating environmental and social value.



CopenHill / Amager Bakke demonstrates how architecture and infrastructure can collectively address climate resilience, public well-being, and responsible resource management. The project proves that sustainable cities require systems that are not only efficient, but also socially engaging and environmentally regenerative.

Globally recognized as a benchmark for innovative urban infrastructure, CopenHill presents a compelling model for future cities where industrial systems are integrated into civic life through design, ecology, and public participation.

Ultimately, the project transforms infrastructure from a hidden necessity into an active public landscape — redefining sustainability as an intersection of technology, community, and environmental stewardship.