



The artificial ski slope | Photo source [Max Mestour and Amelie Louys](#)

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## WASTE-TO-ENERGY POWER PLANT DOUBLES AS A SKI SLOPE AND MORE

 SUSTAINABILITY

### The CopenHill power plant includes the world's largest artificial climbing wall, tree-lined hiking trails and an artificial ski slope

**Spotted:** Danish architecture firm, BIG, has built what it claims is the cleanest waste-to-energy power plant in the world. The power plant comes with tree-lined hiking trails, the world's largest artificial climbing wall and an artificial ski slope.

The CopenHill power plant, also known as Amager Bakke, is located on an industrial waterfront in Copenhagen. It is capable of converting 440,000 tons of waste into electricity and heating for 150,000 homes annually. The building was designed so that its machinery is arrayed in order of height, creating the sloped rooftop which forms the ski terrain – forming a mountainlike structure in the flat city.

The power plant encompasses ten floors of space, including an education centre, offices, and space for workshops and conferences. The building is constructed from aluminium bricks, with slots for windows that allow natural light in. CopenHill's ski slope measures 400 metres and includes a 180-degree turn halfway down the piste, and skiers ascend using a platter or carpet lifts, or a glass elevator.

In addition to skiing, guests can visit the rooftop bar, cross-fit area, climbing wall and hiking and running trails. There is also a garden, designed to absorb heat, minimise rainwater runoff and create a green space for local birds. Bjarke Ingels, the founder of BIG, told [Architecture Digest](#) that CopenHill provides, “a crystal clear example of hedonistic sustainability,” and is so clean that it could act as, “the bedrock of the social life of the city.”

At Springwise we have seen many innovations in sustainable building design, from [pre-fab housing](#) made from invasive trees to [energy-positive](#) construction. CopenHill takes this further by turning a building into a public space. Back in 2015, Springwise also covered this innovation when it was commissioned by architects! You can find the link to the article here:

<https://www.springwise.com/waste-to-energy-power-station-public-ski-slope-art-installation/>

10th January 2020

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## **Takeaway:**

The city of the future will need to do more than incorporate sustainable buildings into the existing infrastructure — it will need to integrate those buildings into the fabric of the city. CopenHill leads the way in the design of future cities, with buildings that are not only sustainable but add a new dimension to city life, incorporating public green spaces and other amenities. Buildings like this demonstrate that not only is sustainable construction better for the environment, it is also more enjoyable for everyone.