Solar-Powered Site Cabins

Looking out the window between the stations Praterstern and Traisenstraße, passengers travelling by train through Vienna can catch a glimpse of the first photovoltaic system on the roof of a temporary construction site office in the Austrian capital. For the past few years, a new urban development has been under construction here in the Nordbahnhof area of the city's second district. On one of the construction sites operated by STRABAG, a pilot project was recently launched to supply the construction site cabins with green energy from a photovoltaic system.

The container ensemble houses the offices for 20 members of the STRABAG construction team who are currently busy realising the residential projects Nordbahnhof 1BC+2A. Their work requires not only numerous electronic devices such as laptops, monitors, smartphones and tablets but also air-conditioning units and heating systems. These consume a lot of electricity that was previously drawn from the public power grid. At Nordbahnhof, this energy demand will now be covered in a climate-neutral manner thanks to the photovoltaic system on the roof of the container cabins. Any energy produced in excess of what is needed by the site office is made available for use on the construction site itself.

1 Solar power is produced on the roof of 18 construction site cabins for use inside the office space and on the site



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1 The construction site where the cabins and some of the equipment are powered by solar electricity is located at the Nordbahnhofgelände, the site of a former freight station in Vienna/**2** The photovoltaic system consists of 108 panels with a total surface area of 235 m².

The goal: off-grid, self-sufficient construction sites

The photovoltaic system, consisting of 108 panels with a total surface area of 235 m² on 18 container roofs, will generate a peak output of 48 kW. Planning, implementation and maintenance will be carried out internally by STRABAG BMTI, the mechanical engineering service provider within the STRABAG Group. In a first step, the solar power will cover the energy needs of the site cabins. In the future, large equipment and machines, such as cranes and excavators, could also be operated entirely with green energy.



The pilot project at Nordbahnhof is an important step towards a sustainable construction industry. The building process consumes a lot of energy, and it is important not only to reduce the amount of energy needed through optimised process planning, but also to substitute it with electricity from climate-friendly sources. The data that we generate here will gradually bring us closer to this goal.

Klemens Haselsteiner



