

Excursions

Excursion 1: 50 solar energy housing estates in NRW

Visit to the solar energy housing estate in Cologne-Riehl (existing buildings, 133 apartments) and the solar energy housing estate in Leverkusen (passive use of solar energy, 47 apartments).

A total of 50 solar energy housing estates are due for completion in Nordrhein-Westfalen over the next few years. The aim of the project is to demonstrate the possibilities of both the passive and the active use of solar energy in the construction area and to support the commercial launch of solar building.

Excursion 2: Future energies and science

Visit to the photovoltaics test laboratory of TÜV Rheinland and the German Aerospace Center (DLR) in Cologne.

This tour takes us to state-of-the-art research facilities and makes clear where Nordrhein-Westfalen stands as regards the development and application of future-orientated energy technologies.

Excursion 3: Energy-related use of wood

Visit to the wood chip heating plant in the "energy town" Nettersheim.

With Biowärme Nettersheim work was begun on the consistent and ongoing development of the overall municipal strategy in environmental and climate protection. This has given rise to a reality-based vision: the Nettersheim of tomorrow will be a reference community for sustainable economic management, with CO₂-balance-neutral energy generation in terms of heat and power as the central criterion for success.

Excursion 4: Fuel Cells in NRW

Visit to the GEW in Cologne.

At the purification plant in Cologne-Rodenkirchen the gas, utility and water supply companies Cologne (GEW) conduct the first 200 kW fuel cell plant in Europe which is fuelled with sewage gas.

Excursion 5: Renewable energies in school

Visit to the Emilie-Heyermann-Realschule and the Bodelschwingschule in Bonn.

The Emilie-Heyermann-Realschule belongs for nearly 20 years to the most active schools in Nordrhein-Westfalen which incorporated the topic energy efficiency and renewable energies with different projects and activities into the school everyday life. These activities have recently been multiplied internationally. The photovoltaic roof of the Bodelschwingh School consists of a system. The amorphous silicon thin-film solar panels are applied by lamination to the profiled plates and generate electricity even under diffuse light conditions. By November approximately 500 square metres of photovoltaic surface will have been installed in this fashion at 3 schools in Bonn.

Excursion 6: Energy-related use of sewage gas and passive use of solar energy

Visit to the urban purification plant Bonn and the solar house of the family Feix in Bonn.

The visit to the urban purification plant Bonn gives an insight into the production of heat and electricity from sewage gas in a very energy-efficient way by means of a cogeneration plant. The solar house of the family Feix is a passive solar home with thermal solar plant, air ventilation and heat recovery system.