Saving energy in industrial parks: new online tool helps economic developers and climate-protection managers

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New energy-saving concepts for industrial parks have been developed by a team of RUB engineers headed by Prof Dr-Ing. Hermann-Josef Wagner from the Chair of Energy Systems and Energy Economics on behalf of the Federal Ministry of the Environment. Collaborating with partners under the umbrella of the "GET.Min" project, they have analysed four industrial zones to test in what way enterprises in an estate can benefit from each other. Based on those data, the team developed a web tool which interested parties can use to determine energy-saving potentials. "This check is the first one of its kind in Germany, and the first instrument that gives an overview over energy consumption in industrial estates," says Wagner.

Identifying saving potentials using four industrial estates

Four industrial estates housing different industries in Waldbröl, Viersen, Siegen and Medebach took part in the research endeavour. In order to get the project started on site, a "park ranger for energy" was employed. He organised workshops dealing with different topics, liaised between the individual enterprises and suggested the creation of purchasing syndicates for energy. His duty also included locating experts for various energy questions in the enterprises, who were subsequently listed in an expert database.

Savings of ten per cent possible

The "park ranger", moreover, carried out measurements in the enterprises, provided they granted a stranger a look into their production processes. The measurements that took place have often yielded illuminating results. In one case, an energy-draining defect was detected which could thus be fixed. However, a much simpler task was to suggest changes in uncritical areas, for example in terms of lighting. An enterprise can easily save money by switching over to LED-lamps or by changing its habits, for instance by turning lights on only where strictly necessary. The financial incentive for saving energy is not as big as one would expect, however. This is because energy costs are a small proportion of the total turnover. "Still, it is possible to achieve savings of ten per cent, in our experience," says Hermann-Josef Wagner.

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