Improving mega-site revitalisation strategies by trading off benefits from future land use and clean-up costs

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Abstract Derelict land, where former industrial, military and mining activities have often led to vast contaminations of soil, groundwater and surface waters, is a problem in many urban areas in Europe. Facing competition with greenfield development, the re-use of these areas is only achievable if management options optimally trade off the conflicting goals of protecting human health and the environment, of microeconomic needs and of regional development. To assist decision-making in finding optimised revitalisation strategies, we propose a GIS- and model-based planning and assessment tool that links land-use planning, risk-assessment, cost and benefit evaluation. The paper describes the key elements of the tool’s concept by means of a demonstration project at a former military site in Potsdam, near Berlin, Germany.