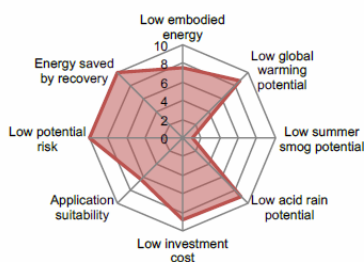


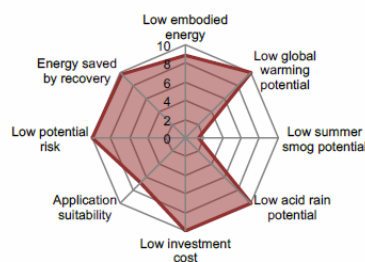
Evaluation and Comparison of Flat Roof Insulation

The independent Swiss consultancy firm Büro für Umweltchemie (BFU) has developed a multi-criteria evaluation and comparison of different insulation materials. The outcome is a simple and practical graphical tool that visualises the strengths and weaknesses of insulating materials in various applications¹. In the case of flat roof insulation the spider diagrams show that grey EPS has the best overall results with regards to the LCIA indicators for production. The material has also a small mass per square metre. Stone wool and foam glass have major disadvantages in several categories.

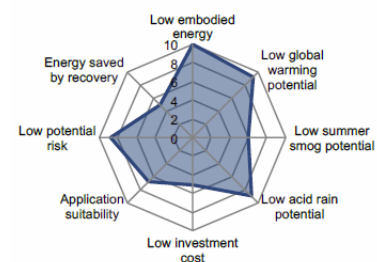
■ White EPS 23 cm



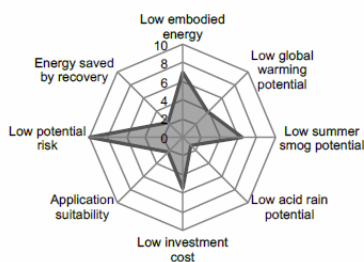
■ Grey EPS 21 cm



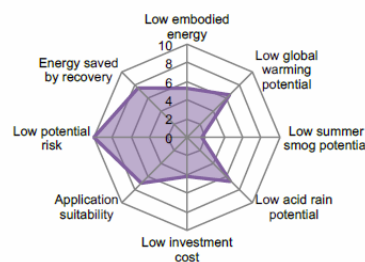
■ PUR/PIR 15 cm



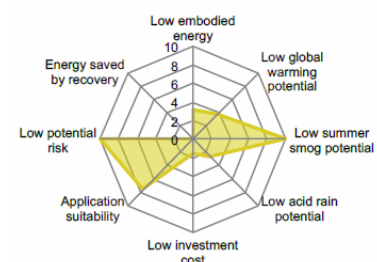
■ Stone wool 26 cm



■ XPS 24 cm



■ Foam glass 24 cm



- Principles of the spider diagram:
 - The selection of the criteria (axes) represents the whole life cycle.
 - The criteria are based on objective characteristics and comparable data.
 - Best values are shown at the outside of the spider axes.
 - The axes indicate the extreme values within a given application.

¹ see Büro für Umweltchemie Report „[Multi-criteria Comparison of Insulation Materials](#)“, 8 March 2018