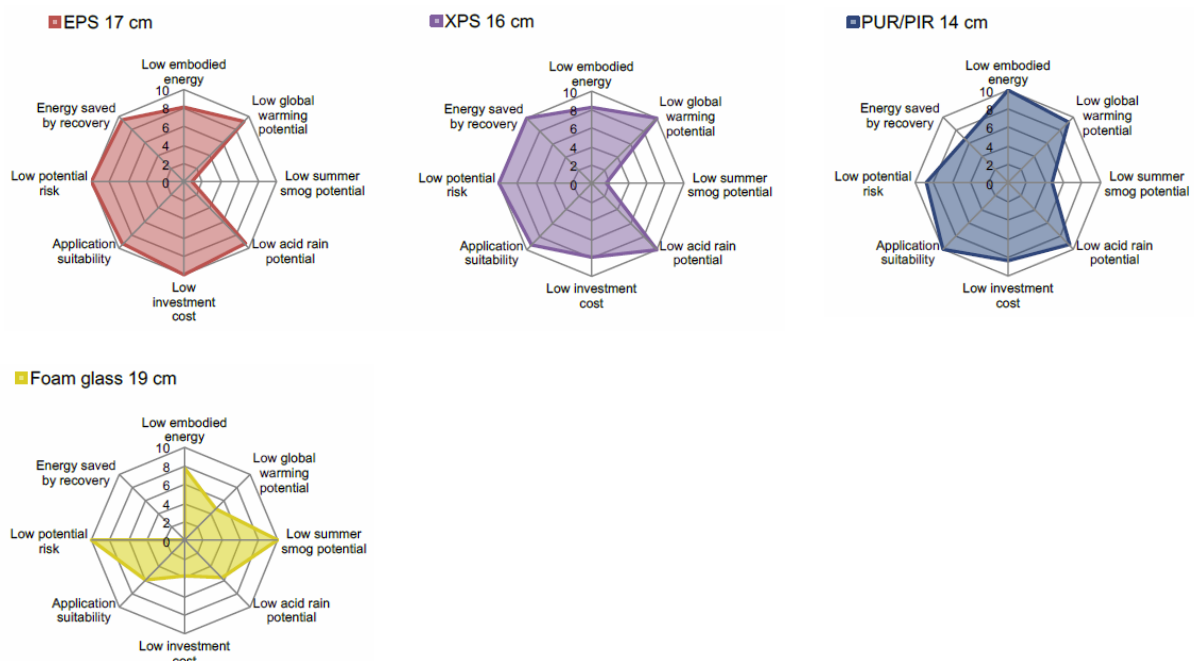


Evaluation and Comparison of Perimeter Insulation

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 perimeter insulation the spider diagrams show that PUR/PIR has the best performance regarding LCIA indicators of the production phase. EPS and XPS achieve the highest scores regarding the energy saved by recovery. The application suitability for EPS and XPS is only slightly lower than for PUR/PIR while prices are only slightly better for EPS than for XPS and PUR. Foam glass has the lowest summer smog potential of all materials considered but otherwise no particular advantages.



- 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