

EPS saves precious fossil resources

It is absolutely essential to reduce the amount of oil we consume. Although polystyrene is an oil-based product, only an extraordinarily small amount of this precious natural resource is required to produce it. This is because expanded polystyrene (EPS) effectively consists of 98 % air and only 2 % polystyrene, the cells which contain the air. For every litre of oil that is used to manufacture EPS building insulation, up to 200 litres of heating oil is saved over the life of the product. Thus, there is almost no better use for oil than the production of insulating material!



Photo: Cell structure of EPS under a microscope

- The primary non-renewable energy input value of EPS stated in the current Environmental Product Declarations (EPD) developed in accordance with the standard ISO 14025 clearly show that EPS requires the use of far fewer fossil resources (oil, gas, coal, etc.) than the “ecological alternatives” mineral foam and wood fibre.

Insulation for ETICS	PED n.r. MJ *)	EPD-No.
EPS grey	43.19	EPD-EUM-20160273-IBG1-EN
EPS white	48.51	EPD-EUM-20160269-IBG1-EN
Hemp fibre	49.45	baubook-Nr. 1383 ip
Mineral foam	55.35	EPD-XEL-20180168-IBD1-DE
Mineral wool (MW)	75.88	EPD-DRW-20120113-IBC2-EN
Wood fibre	98.45	PAV-2013254-CBG2-EN

*) per functional unit (1 m² area with R = 1 m²·K/W)

Source: Institut Bauen und Umwelt e.V. (IBU) and baubook

- Only 0.1 % of total oil consumption is used for the manufacture of EPS.