Shower Heat Recovery

Embodied Carbon

At Zypho®, we have always made the highest efforts to use materials most efficiently in all our products.

Copper

Whilst we need to use copper for heat transfer purposes on the current horizontal units, we are confident that it is used as efficiently as possible.

CO_2

For the current horizontal model (iZi30), the embodied carbon present (made chiefly from copper and ABS moulded plastic) equates to ~16.5 kg CO_2.

For the vertical Pipe65, stainless steel, the figure is ~55 kg CO_2.

"Payback"

As soon as the Zypho® units go into operation in homes, all our products have rapid paybacks in terms of CO_2.

The Carbon saving will depend on how the hot water is made, assuming:

a. making HW costs 0.25 kg CO_2 per kWh heat,
b. the average household is using 1500 kWh HW per year on showering

Model	iZi30 (Horizontal)	PiPe75 (Vertical)
Energy Saving Potential	±500 kWh/year	±1000 kWh/year
CO_2 Saving Potential	125 kg CO_2/year	250 kg CO_2/year
"Payback Time"	1.5 months 16.5 ÷ 125 = 0.13 years	2.6 months 55.0 ÷ 250 = 0.22 years

Environmental Product Declaration (EPD)

Finally, it is important to note from an Environmental Product Declaration (EPD) point of view that, thanks to the passive operation of the Zypho® unit, there is no running cost/operational carbon impact.