The heat transfer data used below has been calculated in accordance with BS EN ISO 12241:1998

Pipework Data

Operating Temperature (°C) = 80

Ambient Still Air Temperature (°C) = 30

Pipe Material = Black Steel

Pipe Emissivity (uninsulated) = 0.9

Pipe Orientation = Horizontal

Rockwool Insulation Type = Rocklap H&V Section

Cladding Type = Aluminium Foil

Fuel Type = Gas

Gross Fuel Cost (pence per kWh) = 4.1

Plant Efficiency (%) = 79

Net Fuel Cost (pence per useful kWh) = 5.19

Plant Utilisation (hours per day) =

Plant Utilisation (days per year) =

Plant Utilisation (hours per year) = 6205

Net Fuel Cost (pence per W per year) = 32.20

Gross CO_2 impact (kg per kWh) = 0.206

Net CO_2 impact (kg CO_2 per useful kWh) = 0.261

Net CO_2 impact (kg per W per year) = 1.618

1" Valve 6 25 80 10.9 69 415 £133.71 0.7

1" Valve 6 40 80 8.7 71 428 £137.96 0.7

Pipe O.D. (mm)	Pipe length (m)	Rockwool thickness (mm)	Heat loss (W/m)		Heat Saving		Cost saving per year	CO_2 Saving per year tonnes
			Bare surface	Insulated surface	W/m	W		
1" Valve	1	30	13.3	1.37	11.83	71.33	£22.99	.012
1" Flange	1	30	6.65	0.685	5.915	35.665	£11.50	.006

Economy of Insulated Plant

Gross CO_2 impact (kg per kWh) taken from Defra document 'Guidelines to Defra's GHG conversion factors for company reporting' June 2007

A MORE DETAILED VERSION OF THIS DISCLAIMER IS AVAILABLE ON OUR WEB SITE.

The above calculations use Rockwool's' DECLARED thermal conductivity values. DESIGN thermal conductivities can be incorporated when sufficient information is

supplied (see 'Industrial calculations undertaken by Rockwool' for more details).

All information, calculations, replies and/or specification contained herein is solely based upon the details supplied by you. It is the responsibility of the user to confirm the

adequacy and accuracy of the information supplied. For the avoidance of doubt, you acknowledge and agree that Rockwool Limited ("Rockwool") have a very limited

knowledge of the project in question and if the information you supply is not accurate then the information, calculation, replies and/or specification Rockwool provide herein

will not be accurate as a result of such inaccurate information. Rockwool makes no representations nor gives any warranties of any kind as to the accuracy or completeness of

the information, calculation, replies and/or specification provided by Rockwool's Technical Support Department.

Heat loss (W/m) Heat saving

Basis of calculation: Valve = 1m; Flange = ½m