5.9 Technical Specification: Industrial Piping Insulation

Small Premium Project Type:
Adding insulation to previously un-insulated hot water pipes to save energy used to heat (or re-heat) the water.

Description:
The water temperature set-point must be between 120 – 160°F. The boiler must be within its service life and in good repair. The measure must add at least one inch thick fiberglass pipe insulation (R- 4 minimum) to previously un-insulated hot water pipe.

Minimum Operation:
The boiler system must be in use (Full Load hr/yr) at least 2,500 hours per year.

Equipment Type, Capacity and Performance:
The measure must add at least an R-4 insulation value (one inch thick high density, fiberglass pipe insulation) to a previously uninsulated pipe. The pipe insulation must be high density fiberglass designed for the pipe diameter and provide a snug fit. All seams must be taped or otherwise sealed.

Insulation exposed to outside must be a weather resistant system, with durable, UV stable, waterproof finish. Pipe insulation installed in buildings must conform to the requirements of the Building Code; must be tested in accordance with ASTM E 84 or UL 723, using the specimen preparation and mounting procedures of ASTM E 2231; and must have a maximum flame spread index of 25 and a smoke-developed index not exceeding 450.

Incentive Estimate Worksheet:
The incentive worksheet shown in the following table is the prescribed tax credit amount that small premium projects can receive for piping insulation. The tax credit amount is based on the linear feet of the insulation installed per the nominal pipe size.

A Pipe Dia. (inches)	B Linear Feet insulated	C Incentive Amount $/ Ln. Ft.	D Incentive ($) B x C
1		$3.26	
1.5		$4.39	
2		$5.52	
2.5		$6.65	
3		$7.79	
3.5		$8.92	
4		$10.05	
		Total from Column D	