RADIANT SNOW MELTING COMPARISON

	HEATIZON Low Voltage Electric	ELECTRIC High Voltage Radiant System	HYDRONIC Hot Water Radiant System
Energy Source	One energy source — electric; no emissions		Two energy sources — Natural Gas/Propane products of combustion: CO, CO^2, Nitrous Oxides (greenhouse gases); plus electricity for pumps, valves, etc.
Energy Efficiency	100% — operates only during snowfall hours		25 to 65% — Wintertime idling plus snowfall hours. Depending on geographic location
Maintenance	Zero maintenance — no moving parts to maintain, nothing to oil or clean		Annual maintenance required — continuous maintenance of equipment including glycol replacement, air bleed, balance valves, pumps, boiler, heat exchangers, pressure valve certification, etc.
Venting	No Venting Required		Venting required for both exhaust and fresh air
Fall Start Up	Simply check circuit for continuity and power output (less than 10 minutes/circuit)		Test, repair and replace parts, pump seals, valve balance, glycol renewal, boiler parts, branch glycol flow rate checks, etc.
Required Floor Space	None — Control units wall mounted, typically next to main power panel		A mechanical room is required. Size ranges from 100 ft^2 up to 600 ft^2 based on system size. Room space costs is \$100 to \$500/ft^2
Performance	Standard design is 22 to 25 W/ ft^2 (87 Btu/ft^2) with E101 Tuff Cable Heating Element on 6" spacing; melts up to 1.5"/hour of snowfall	Standard design is 28 to 30 W/ ft^2 (100 Btu/ft^2) with SMB/SMC heating cable on 12" spacing. Melts up at 1.5"/hour of snowfall.	Standard design is 100 Btu/ft^2 with PEX tubing on 12" spacing. Melts up to 1.5"/hour of snowfall.
Upset Condition	Overcurrent/ Undercurrent protection built in to Control Unit circuitry. No damage and no environmental issues.	Control system with ground fault safely shuts down system. No damage and no environmental Issues.	Leaking glycol to soil continues until someone notices leaks or is alert to loss of glycol in the system. Environmental issues.
Repair Plan (If Needed)	Electric detection method locates fault within 1 to 2 feet. Cable fault location is exposed and the heating element is repaired.		Glycol leak requires first checking fittings outside pavement. Second, "in-pavement" leak cannot be easily located. EPA must be notified.
Installed Cost	\$11 to \$16/ft^2 based on size and local conditions		\$15 to \$22/ft^2 based on size, mechanical room value, and local conditions
Operating Cost	Typically less than snow plow service		Must include both energy sources (i.e. electricity and natural gas/propane) consumed during idling time and snowmelt time.