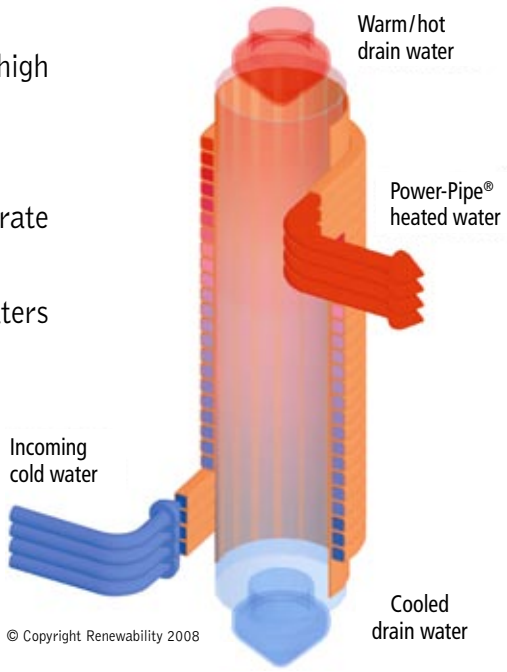
RenewABILITY ENERGY INC.

POWER-PIPE®

Drain Water Heat Recovery
For the Home Owner

Benefits for the Home Buyer

- **Reduces water heating costs** by up to 40%
- Can be used with ANY type of water heating system
- **Maintenance free**
- **Will last 50+ years** – made of 100% high quality Type L copper
- **Affordable**
- **Excellent return on investment** at a rate of 10% to 50%
- Extends the life any primary water heaters
- **Reduces green house gas emissions** by up to 1 tonne/year with a family of 4
- Doesn't affect lifestyle or comfort (***no noticeable pressure loss***)
- Can improve home comfort by greatly increasing hot water capacity and reducing cold thermal shock
- Independently **tested and verified** by Natural Resources Canada
- Government and Utility grants available



ASK ABOUT ENERGY STAR

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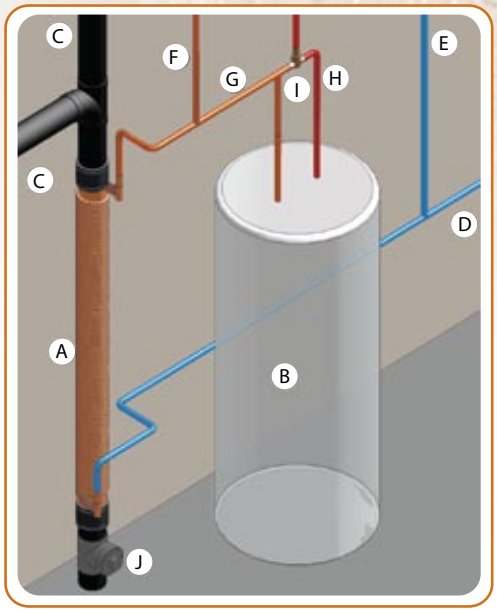
SAVINGS VERIFIED BY Natural Resources Canada

Canadian developed and manufactured

www.renewability.com

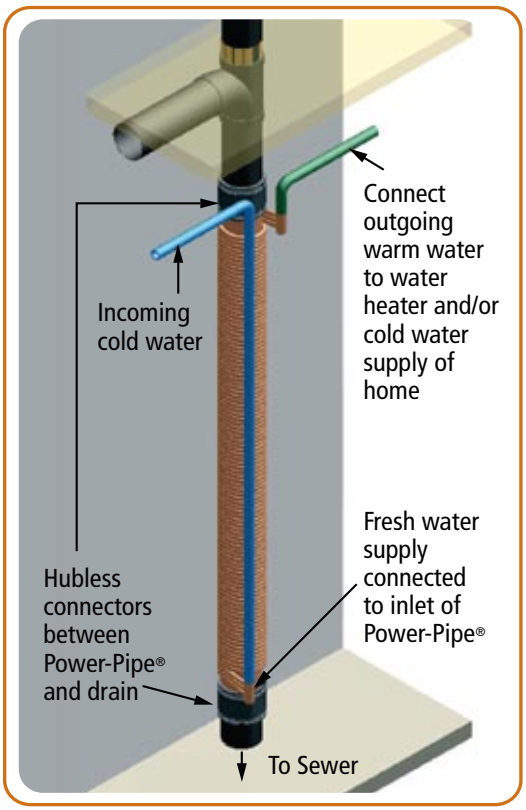
How Does **Drain Water Heat Recovery** (DWHR) Compare to other water heating technologies?

	ENERGY SAVINGS	RETURN ON INVESTMENT
Power-Pipe® Model R3-60	**25 - 40%**	**10 - 50%**
Standard On-Demand	**13 - 29%**	**3 - 15%**
Solar Water Heating	**35 - 55%**	**4 - 6%**



Legend:

A - *Power Pipe®*
B - *Water heater (any type)*
C - *Incoming drain from bathrooms*
D - *Incoming fresh water*
E - *Cold water to kitchen sink, diverted before Power Pipe®*
F - *Water to all other cold water fixtures*
G - *Water supply to water heater*
H - *Hot water to entire home*
I - *Mixing/Anit-Scald valve (not in all homes)*
J - *Drain clean-out port, outgoing drain to sanitary sewer*



Power-Pipe® – A Falling Film Heat Exchanger

- As liquid falls down a vertical section of pipe, it clings to the inner surface in a very thin film
- For this reason, DWHR units must be installed vertically
- The energy from this film is transferred easily and efficiently to the fluid circulating in the coil of the Power-Pipe
- As seen in the diagram (left), the result is the cool coil flow is heated, while the warm drain flow is cooled