Customer operating parameters	
Total number of usable showers	**1**
Shower occupancy	**100%**
Operating time per shower (minutes)	**10**
Frequency of shower per day	**4**
Flow rate at shower head	**9.5 lpm (2.5 gpm)**
Building water heater configuration	**1 apartment per water heater**
Water heater efficiency	**78%**
Configuration of Eco-GFX system	**Equal flow 100%**
Select temperature units	**F°**
Temperature of drain water in F°	**37.8**
Temperature of cold water in F°	**15.6**
Energy used	**Gas (m3)**
Total cost of energy $/ m3	**$0.50**

Model selection	Scenario 1	Scenario 2
Model selection	**ThermoDrain TD-340**	**2360**
Number of showers per DWHR unit	**1**	**3**
Unit nominal efficiency	51%	57%
Selected configuration efficiency	51%	57%
Maximum design flow rate	2.5 gpm	7 gpm
Average unit flow rate	2.5 gpm	2.5 gpm
Quantity of DWHR units installed	**1**	**1**

Calculations	Scenario 1	Scenario 2
Total shower time per year	244.6 hrs	244.6 hrs
Wasted energy during 1 hour of shower	10.46 kWh	10.46 kWh
Total wasted energy in 1 year	2558 kWh	2558 kWh
Energy recovered yearly	1304.58 kWh	1458.06 kWh
GJ recovered yearly****	3.91 GJ	4.37 GJ
Therms recovered yearly***	49.7 Therm	55.55 Therm
Volume recovered yearly**	125.5 m3	140.27 m3

Cost analysis and payback	Scenario 1	Scenario 2
Model Selected	ThermoDrain TD-340	ECO-GFX 2360
Model Price	**$550.00**	**$800.00**
Installation cost per unit	**$50.00**	**$100.00**
(A) = qty of units x cost/unit	$550.00	$800.00
(B) = qty of units x installation cost/unit	$50.00	$100.00
Total installed cost = (A)+(B)	$600.00	$900.00
Annual Savings	$62.75	$70.14
Potential payback period	9.6 years	12.8 years
Energy inflation rate	**2.00%**	2.00%
Potential savings after 20 years*	$1,524.66	$1,704.22
Potential rate of return 20 years*	10.3%	6.5%

**1 kWh = 0.0962m3

***1 m3 = 0.396 Therm

****1kWh = .003GJ

Disclaimer: All **energy savings** listed on this page are by their nature, theoretical. The calculations performed are an estimate of the potential savings under the given circumstances and should be considered as such. EcoInnovation or its associates cannot be held accountable for differences between theoretical and actual energy savings.