EnerWorks Lead Product

Solar Collectors:
- Copper, selective coating
- Thin housing, ~ 6 cm depth
- 3 m², other sizes in future

Integrated Pump, Brazed plate heat exchanger, expansion tank
Product & Applications

Solar Heating, floors, ducts and boilers

Solar heating for washing machine

Solar heating for sink and dishwasher

Solar heating for bath and showers

Heat Transfer Module
Multiple Storage Tank Size Options

- **Solar Pre-Heat**
  - 2 X 270 Litres
  - 2 x 80 U.S. Gals.
  - 2 X 60 Imp. Gals.

- **Single Tank**
  - 270 Litres
  - 80 U.S. Gals.
  - 60 Imp. Gals.

- **Single Tank**
  - 450 Litres
  - 120 U.S. Gals.
  - 100 Imp. Gals.
Compact Heat Exchanger/Pump Unit
Flexible Fluid Transfer / Control Lines
North American Market Size

30 million residential tanks

10% replacement rate of 40% technically viable sites
Current Distribution Focus – Residential

- **New Construction**
  - Lower installation costs
  - Builder/banking financing
  - Cost part of mortgage

- **Retrofit**
  - Customer Lease/Rental
  - Installation cost challenges
  - Installation skills challenges
Energy Savings USA
Turnkey Marketing Program – Distributor Support

**Awareness: Information Officer**
- Market awareness
- Lead generation
- Sales closures

**Targeted marketing**
- Leverage distributor databases
- E-newsletters, e-customer support
- Billing statement inserts
- Customer endorsements

**Web Applications**
- Product support
- Installation resources
- Live performance updates

**Event-based promotions**
- Interactive displays
- Public relations

**Logistics: Application Engineer**
- Installation training and certification
- Installation quality assurance
- Product performance and feedback
Product Costs

- *Installed cost goal: less than $2000 CAD*
- *Wholesale pricing ~ $1250 CAD w volume commitments*

The chart above shows the estimated energy savings for various North American residential energy markets. The area above the lease or purchase option denotes approximate energy savings. The lease option indicates savings of 6-7 cents/kWh, while the purchase option shows savings of 3-4 cents/kWh.
### Customer Economics – Target User USA

<table>
<thead>
<tr>
<th></th>
<th>Annual Energy Savings</th>
<th>Return on Investment</th>
<th>Payback (yrs)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Current yr.</strong></td>
<td><strong>$405</strong></td>
<td><strong>$452</strong></td>
<td><strong>30.10%</strong></td>
</tr>
<tr>
<td><strong>15 yr. average</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
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<td><strong>$405</strong></td>
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</tr>
<tr>
<td><strong>Natural Gas</strong></td>
<td><strong>$153</strong></td>
<td><strong>$171</strong></td>
<td><strong>11.40%</strong></td>
</tr>
</tbody>
</table>

- **Annual Lease Payment = $205 + $247 savings**
- **Electricity – Purchase: 3 cents/KWh – Lease: 7 cents/KWh**
- **Solar Fraction = 44% or 2889 KWh**
- **Family of 4 consuming 105 gallons (US) hot water/day**

**Assumptions:**
- 11.5 cents per KWh for electricity
- $0.08 per Therm of natural gas
- Solar storage system with existing water heater
- $1500 installed product cost
- Inflation rate of 1.5% for electricity and natural gas.
Emission Reductions

• **Solar Thermal & Natural Gas**
  Approximately 1.25 TONS CO₂
  Per Installed System per year.

• **Solar Thermal & Electricity**
  Approximately 1.0 TONS CO₂
  Per Installed System per year.

• **Based on 50% Solar Fraction**
  Emissions reductions will increase with higher Solar Fraction.

Assumes 55% fossil fuel in generation mix, 240L of hot water at 55 degrees Celsius per day
Toronto, Ontario.