



# Solar/NG Domestic Hot Water

May 25<sup>th</sup>, 2009

## Introduction- EcoEnergy Solar Thermal

- NRCan EcoEnergy, Enbridge Gas Distribution has partnered with Bullfrog Power to deploy 1,200 units within the EGD franchise territory by Dec 2010.
- DHW represents a core service offering from the utility (Gas Water heating enjoys a ~90% market share)
- Each solar installation will remove ~600Kg of CO<sub>2</sub> annually
- Renewable industry is experiencing double digit growth rates



# An Industry Coming Together

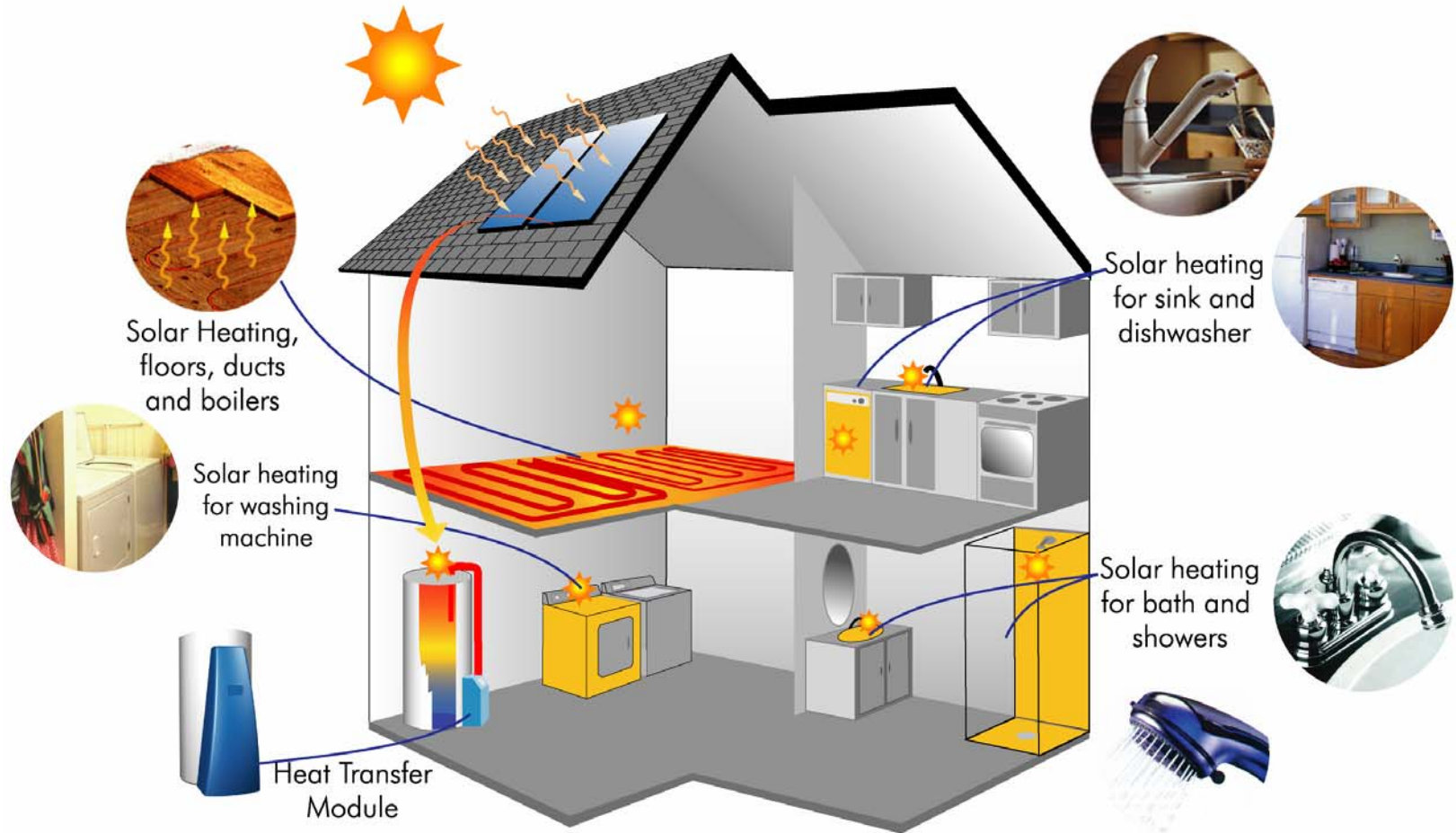


## PhotoVoltaic Vs Solar Thermal

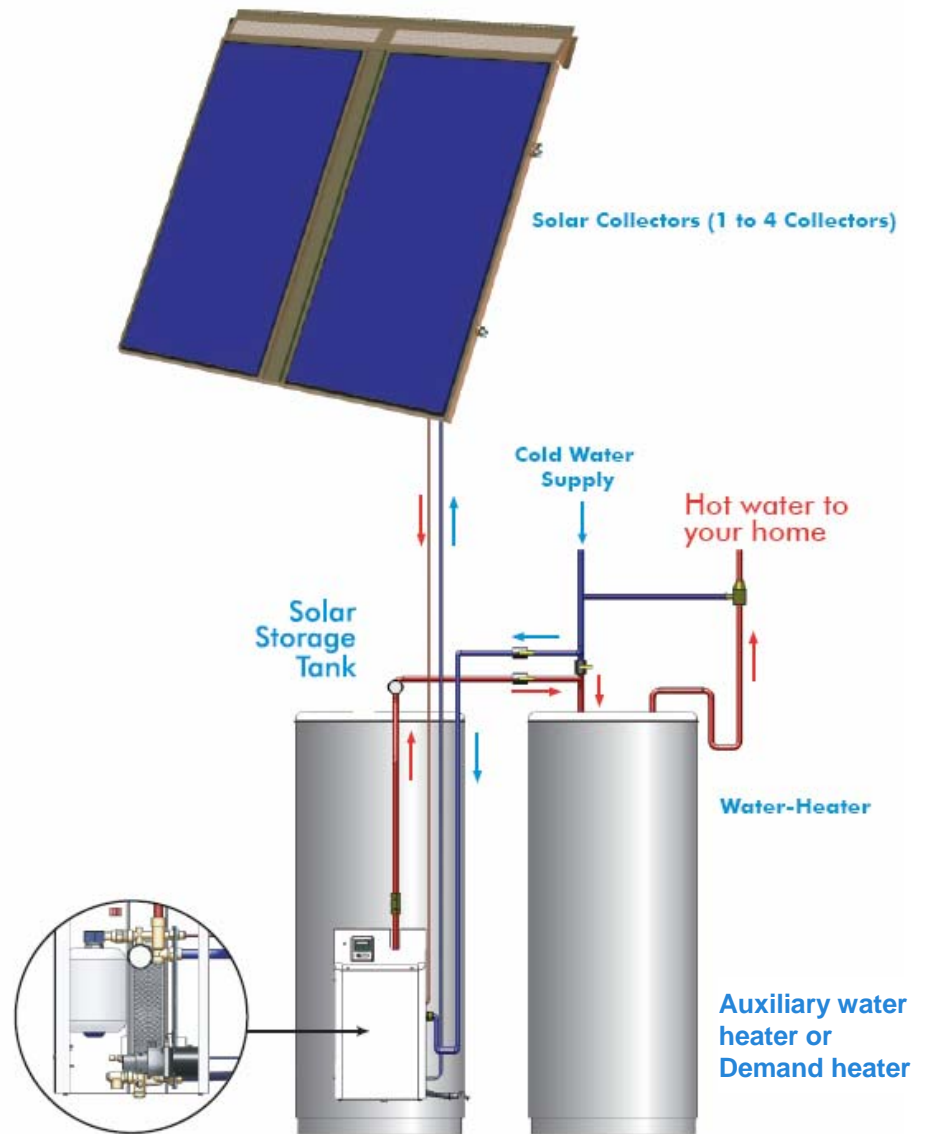
	Grid-connected Photovoltaics (PV)	Solar Hot Water
Peak Energy Delivery	3000 W	3000 W
Panel Area Required for 3 kW	26.32 m <sup>2</sup>	6.7 m <sup>2</sup>
Cost per installed Peak Watt	\$8.00 USD/W	\$ 1.65 USD/W
SYSTEM AT CONSUMER COST	\$24,000	\$6,000

Performance Ratios
Area ~ 4:1
Installed Cost ~ 4:1

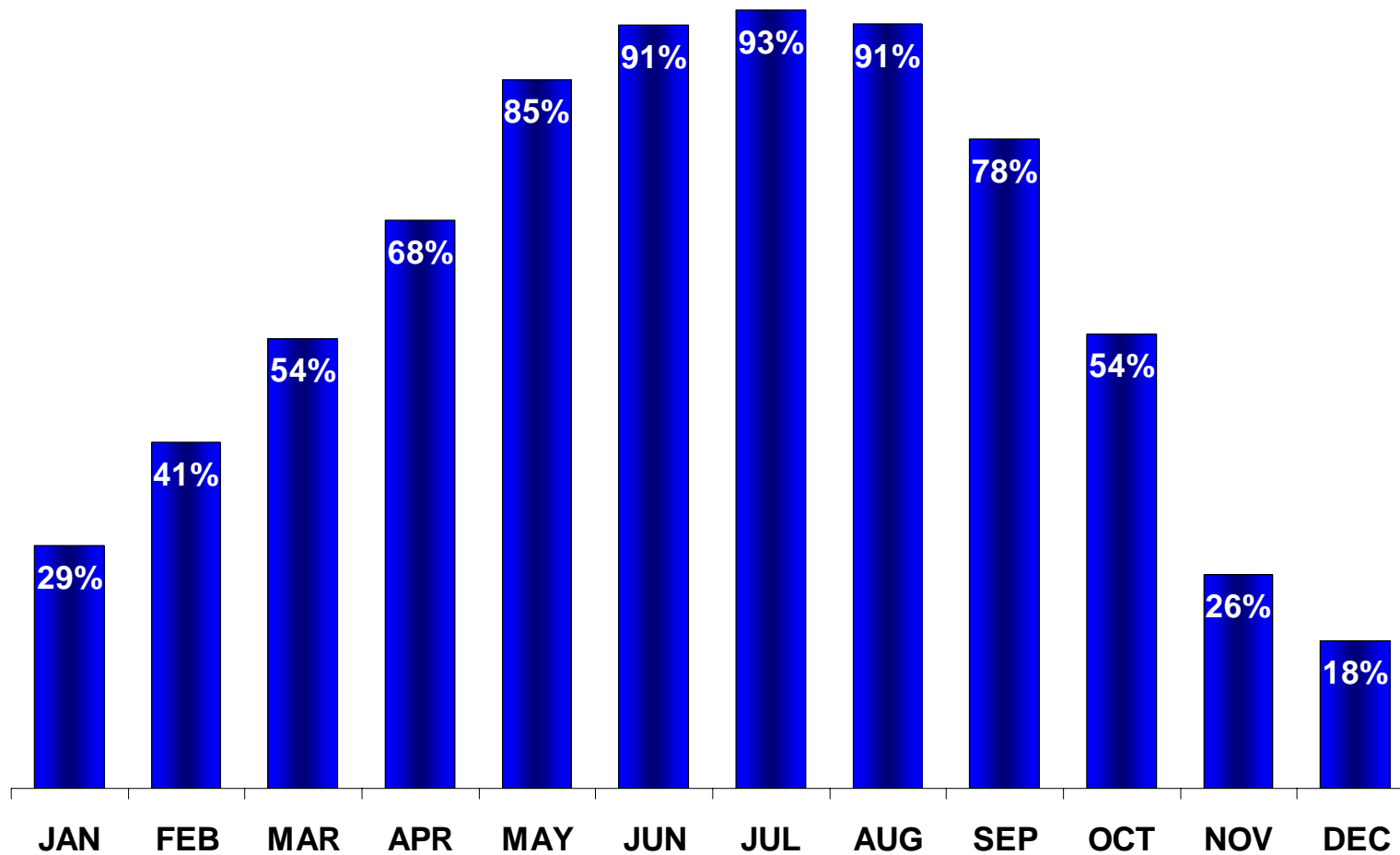
# How it Works



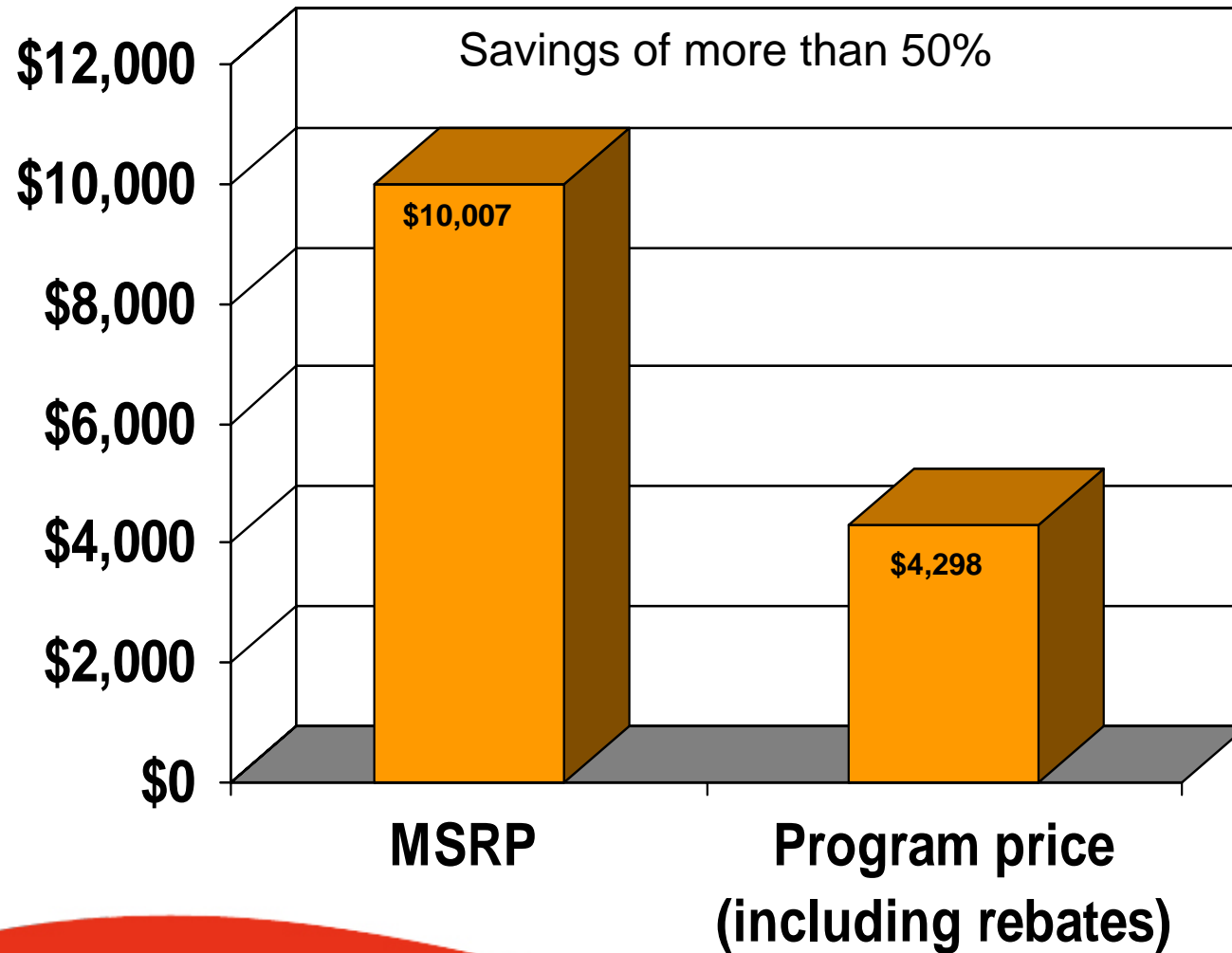
- Solar collectors heated by sun
- Heat-transfer fluid pumped through solar collectors
- Heat transferred to water through heat-exchanger
- Solar storage in series with auxiliary heater



# Phase V – Solar Fraction Toronto



# Program Savings







Bullfrog Power, Canada's leading 100% green electricity provider, offers a simple but significant way for homeowners to purchase renewable electricity, reduce their environmental impact and support new renewable generation.

With the support of the organizations below, Bullfrog is pleased to bring this solar water heating program to your neighbourhood.



Bullfrog Power Inc. and EnerWorks Corp. are not owned or affiliated with Enbridge Inc. or Enbridge Gas Distribution Inc.

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on a limited number of units**

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with free energy  
from the sun!**



**A limited-time offer to  
save up to 50% on your  
own solar water heater  
and help the environment.**



# Process & Timelines

- Call Center
- Site Evaluation
- Financing Application
- Sales Contract Signed
- Building Permit (if applicable)
- Energy Audit
- Installation
- If applicable, monitoring system activated

3-4 weeks



# Two-collector System



# Program Status

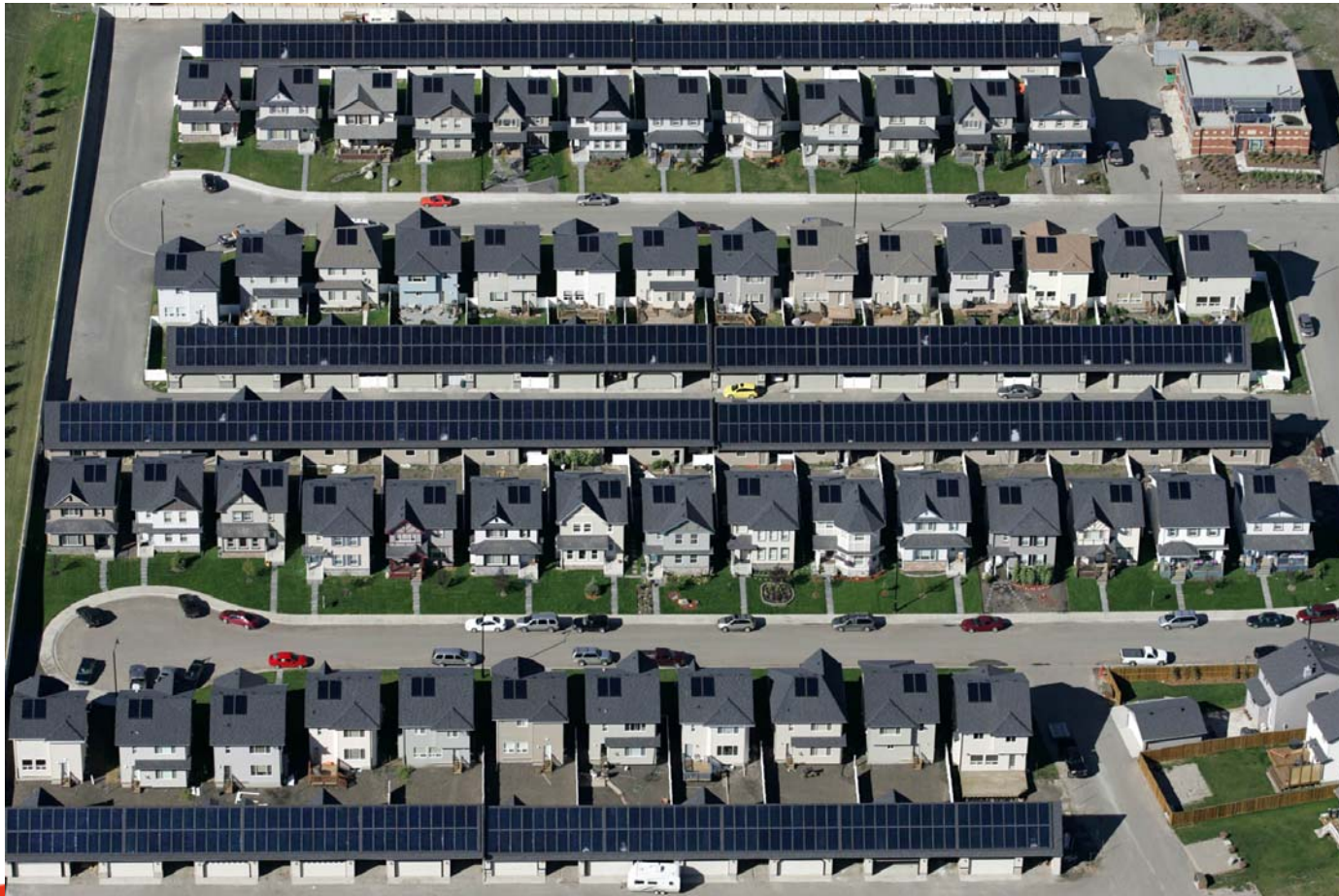
- 200+ Leads have been generated in the first 2 weeks.  
50 systems have been sold
- 8 Installers have been certified to install in the EGD franchise territory (1.9MM consumers)
- Some Marketing through generic bill-inserts has commenced spearheaded by Bullfrog Power.
- Opportunity to launch targeted campaign in conjunction with the City of Markham.



# Drake Landing Solar Community

ATCO Gas operated district heating

Calgary, AB



## 500 System installations in Markham

- 0% financing for residence of Markham applying for a solar thermal system
- 2 day turnaround time on a building permit
- Robust marketing activity led by the City of Markham and supported by Enbridge Gas.

