

# **Information Meeting Solar Buying Group**

**Go Green Together**  
Monday, October 26, 2009



# Solar Energy

- **Technology allows energy from the sun to be converted into electric or heat energy**



Technology

Site

Structure

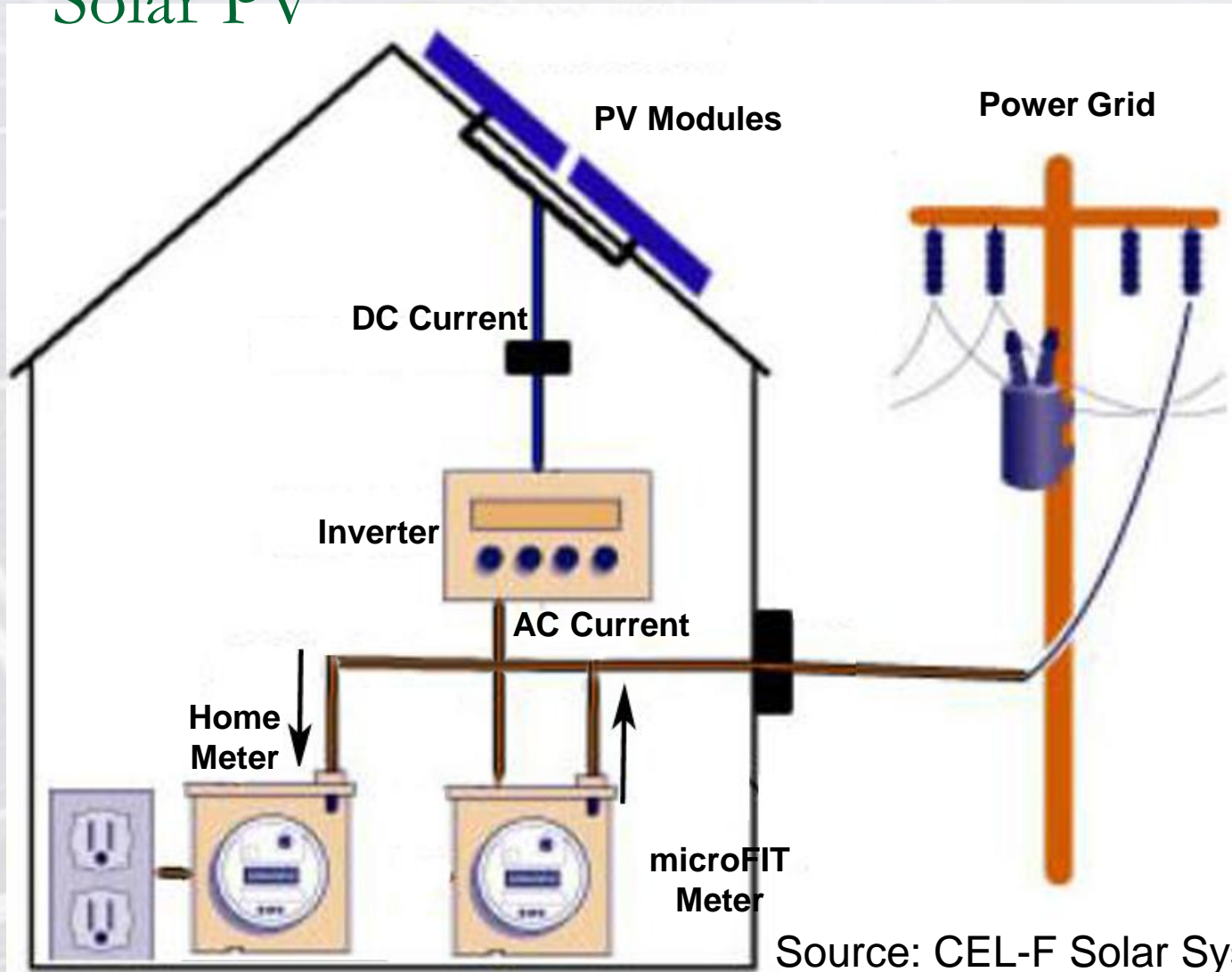
Price

FIT

Starting

# Solar Energy

## Solar PV



Source: CEL-F Solar Systems Ltd. ©

# Assessing Site Considerations

- South facing roof, adequate space
- No shading (time of year, future tree growth)
- Roof structure, condition
- More in the OSEA Solar PV Community Action Manual

# Purchase Options

- Individual purchase and ownership
- Bulk Purchase Model with individual ownership



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# Organizational Structure

## Individual Purchase

### Advantages

- Individual Benefits
- Increased Cost Certainty
- Individual control over decisions

### Disadvantages

- Risk
- High amount of knowledge required
- High Capital Cost may be a deterrent
- Cannot take advantage of Economies of Scale

# Organizational Structure

## Bulk Purchase through Buying Group

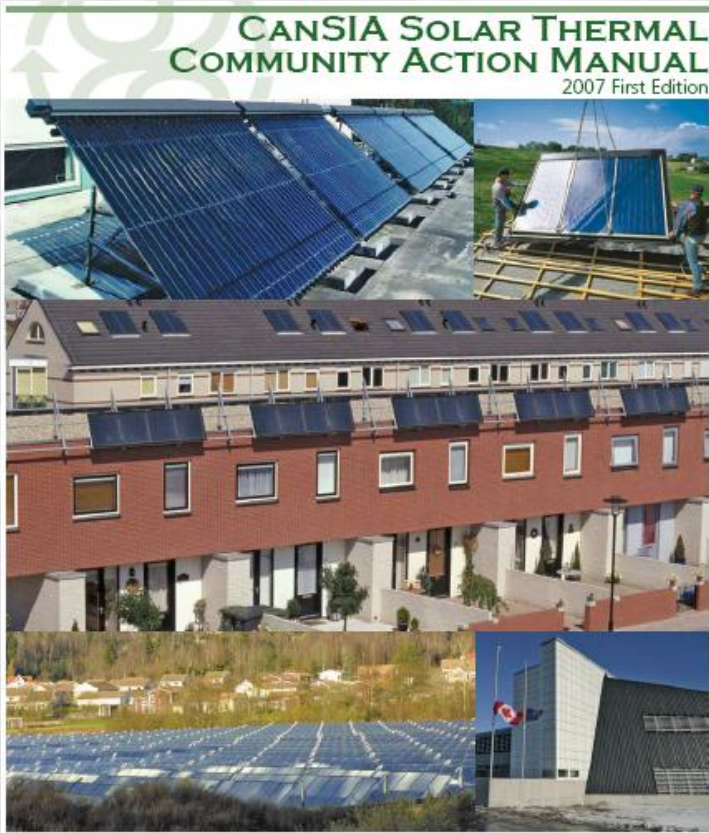
### Advantages

- Economies of Scale
- Cost Efficiency
- Hands-off for most involved
- Support and information from group

### Disadvantages

- Volunteer Inexperience
- Low transfer of expertise
- Price/Participation Fluctuation

# Community Action Manual



- OSEA offers the Solar Thermal and PV Community Action Manuals
- [www.ontario-sea.org](http://www.ontario-sea.org)

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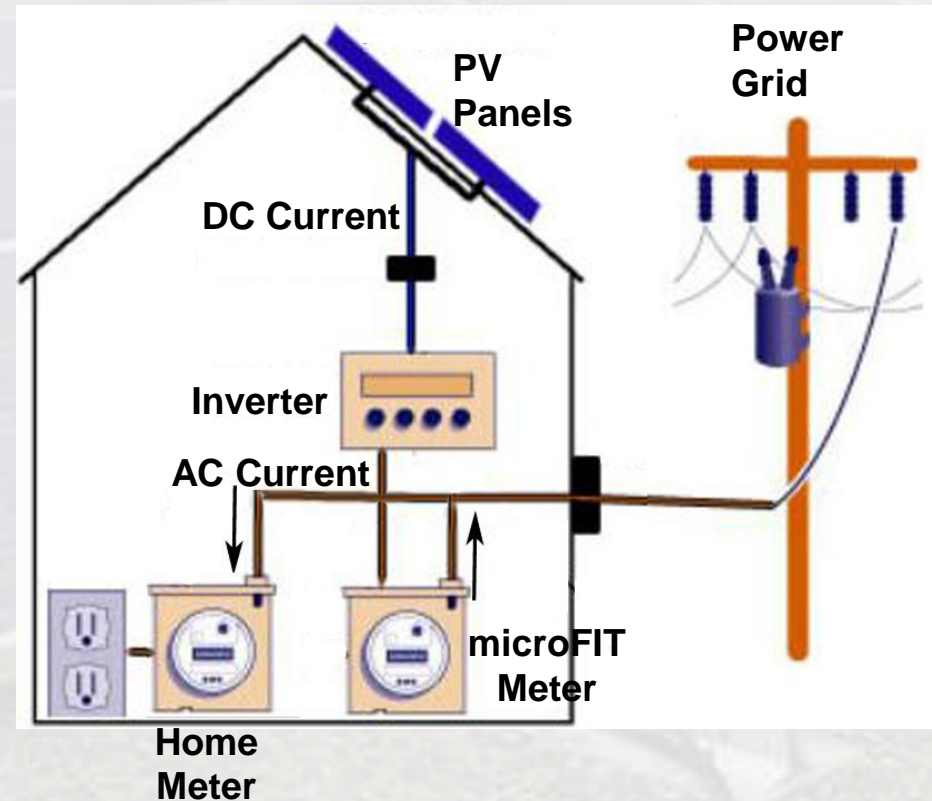
FIT

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# Price & Financing Options

## Price of Solar PV

- Photovoltaic Panels (1 to 10 kW)
- Mounting Rack (flat / pitched roof)
- Grid-tie inverter
- Electrical disconnect, cable, connectors, and installation hardware
- Installation
- Safety inspection



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# Price & Financing Options

## Price of Solar PV

- Connection ready system
- microFIT Connection Fee: Being discussed with Lakefront Utilities
- Price for residential rooftop solar PV is approx. \$8K to \$9K per kW  
(before savings from solar buying group)
- Savings from a solar buying group can be up to 10%.

Technology	Site	Structure	Price	FIT	Starting
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# Price & Financing Options

## Government Incentives

- <http://www.solarneighbourhoods.ca/incentives.php>
- **Solar Thermal** (assuming cost of \$8,000):
  - ecoEnergy and Ontario Home Energy Savings programs grants of up to \$2,500 (combined) for residential system
  - Provincial sales tax rebate (<http://www.rev.gov.on.ca/en/refund/sesr/>)
  - Federal Home Renovation Tax Credit (approx. \$1,050)
- **Solar PV**
  - microFIT (Feed-in Tariff—80.2 cents/kwh)
  - Provincial sales tax rebate (<http://www.rev.gov.on.ca/en/refund/sesr/>)
  - Federal Home Renovation Tax Credit (up to \$1,350)
  - Accelerated CCA (Class 41.3)

Technology	Site	Structure	Price	FIT	Starting
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# Price & Financing Options

## Financing Options

- Cash
- Leasing
- Home Equity Line of Credit

Technology

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# microFIT (Feed-In Tariff)

- For solar PV projects 10 kW and less
- Power from your panels is fed into the grid at 80.2 cents per kwh; you buy power at the normal rate from the grid



Technology

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# microFIT (cont'd.)

Program overview can be found at:

<http://microfit.powerauthority.on.ca>

- You can apply to the program online
- You must arrange connection and metering with the Local Distribution Company (Lakefront Utilities Inc. in Cobourg)
- Once you install your project, you must complete an electrical safety inspection and work your with local distribution company to finalize your connection.

Technology

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**FIT**

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# microFIT (cont'd.)

- Once you have completed your connection to the grid, your local distribution company will contact the OPA with information about your project so that the OPA can prepare and offer you a contract.
- The OPA will send you a notice of your microFIT contract offer by e-mail. Contracts are executed electronically through a secure OPA website.
- Payments will be made to you by your local distribution company on the behalf of the OPA for all the electricity produced by your microFIT project.

Technology	Site	Structure	Price	<b>FIT</b>	Starting
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# Rationale for the microFIT Price

## Why is Solar Electricity So Great?

- Clean energy, offsets pollution sources
- Increases the efficiency of energy supply (alleviate 9% line losses estimated through transmission)
- Peak demand leveling
- Ontario wants to develop a provincial solar industry

Technology

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Structure

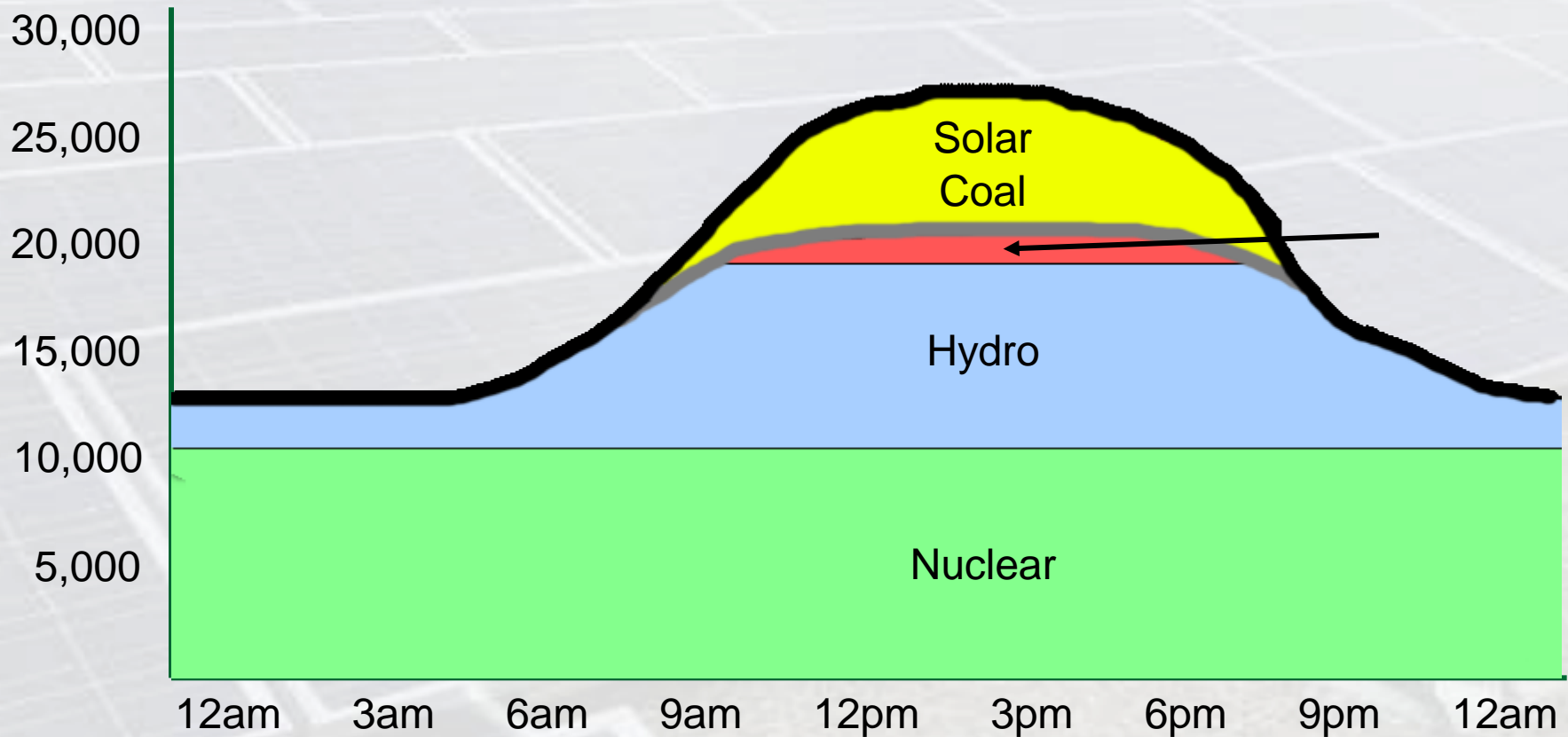
Price

**FIT**

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# Rationale for the microFIT Price

## Peak Demand Leveling



Technology	Site	Structure	Price	<b>FIT</b>	Starting
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# Starting a Solar Buying Group

## 1. Preparing for Your First Community Meeting

- Organize a steering committee of four to six individuals
- Develop print and electronic marketing materials including a group page on the Our Power website
- Develop promotional partnerships with community organizations, elected officials, business improvement associations, schools, churches, community groups
- Review 'Our Power' PowerPoint Presentation for Public Meetings

# Starting a Solar Buying Group

## 2. Vendor Selection Process

- You can choose between drawing up a select list of approved solar vendor/installers or select a single vendor for each technology (solar hot water and solar electric [PV])
- Prepare and issue a request for proposals (RFP) document
- Select vendor(s) based on Our Power vendor selection matrix

Technology	Site	Structure	Price	FIT	Starting
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# Starting a Solar Buying Group

## 3. Follow-Up Public Meeting with Vendor Offers

- Organize a follow up meeting to introduce selected vendors and their technology/pricing to community members
- Publicize meetings through developed community networks and other channels
- Review 'Our Power' proposed agenda for follow-up public meetings

Technology

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# Starting a Solar Buying Group

## 4. Help Finalize Vendor Sales

- Collect sign up forms and forward to vendors
- Local vendor representative will arrange meetings with individual homeowners to perform site assessment, gather other data for building permit, review microFIT contract requirements or historical gas consumption for hot water heating and coordinate installation timing
- Help manage vendor sales effort by directing further questions toward vendors
- Gather performance data from installed systems to promote the benefits of solar energy

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# Other Solar Groups

- SolarShare
- Sustainable Ottawa
- OurPower  
([www.ourpower.ca](http://www.ourpower.ca))
  - WISE
  - RISE



Technology	Site	Structure	Price	FIT	Starting
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# Thank You!

## Question & Comments



**Contact**

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