

# HRM Environment & Sustainability Standing Committee

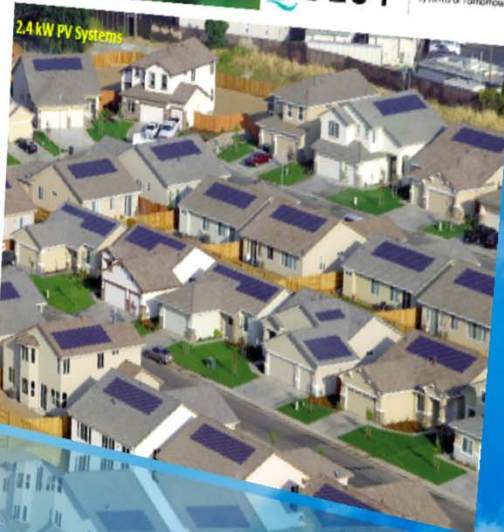
## October 3, 2013



### Quality Urban Energy Systems of Tomorrow (QUEST)

### Summary of Planning for Solar Report

**John Grace, WHW Architects / Genivar**  
member of QUEST Solar Sub-Committee



# Solar Future?



- IKEA has more than ½ million solar panel on stores & factories and generates \$140 million in energy revenue per year
- Walmart uses PV in 200 stores in US and is largest commercial owner of solar power in US
- IKEA turning corporate focus to selling solar to consumers

**“You don’t have to care about the environment and climate change, you can just care about the finances.”**  
Steve Howard  
IKEA’s sustainability chief



# Context for recommendations



- Fall 2012 HRM Commissioned 2 studies – solar implications on subdivisions
- January 2013 E&S Committee asked QUEST NS to review and comment
- Spring 2013 QUEST Multi-Stakeholder Solar Committee Formed

**QUEST**

Nova Scotia  
Solar Sub-Committee

Solar Nova Scotia  
Efficiency NS  
Dalhousie / SMU  
Private Sector - Solar  
(design, consult, supply)  
NS Energy  
HRM

# Context for recommendations



## Solar Energy's Future → Grid Parity

Grid Parity = Cost to produce and use onsite is same as utility

**North American PV Costs (2012)=\$5.3/W**  
(Two recent HRM PV tenders ~ \$4.77/Watt )

**HRM has highest electricity/energy costs in Canada**

**HRM Already A Solar Leader – Solar City!**

Significant planning implications

No need to reinvent the wheel

QUEST focus – pragmatic, cost effective

# Summary of Recommendations

Short Term (1-2 years)

## #1

*Lead by  
Example  
15% Solar*

**It is recommended that...HRM lead by example** and adopt a policy requiring a minimum of 15% of all new HRM owned buildings' energy use is met from solar technologies or integrated design (ie. day-lighting, passive solar, etc)



Halifax Canada Games Centre. CANSIA Solar Award 2011

# Summary of Recommendations

Short Term (1-2 years)

## #2



*Start Rural*

It is recommended that... HRM develop a policy and guidelines that require houses constructed in rural areas follow passive solar criteria.



- Low/no cost
- Experience will help inform suburban/urban context

# Summary of Recommendations

Short Term (1-2 years)

## #3



**Start  
Solar Planning  
Policy  
Development  
Now**

**It is recommended that... HRM start in depth solar planning policy development NOW.**



- Many jurisdictions have already adopted advanced solar planning policies
- Lots of resources to quickly adopt Best Practices
- Planning Department is one of strongest municipal enabling economic development tools

# Summary of Recommendations

Short Term (1-2 years)

## #4 & #5

*Define Solar Ready*

It is recommended that...HRM adopt a definition of Solar Ready and work with the Province to expand existing Efficiency Nova Scotia programming to include rebates and incentives for Solar Ready construction.

*Encourage Solar Readiness Through Incentives*



- No uniformity to existing definition of Solar Ready
- Builders & homeowners are often confused ...and disappointed
- Voluntary incentives help pave the way for future



# Summary of Recommendations

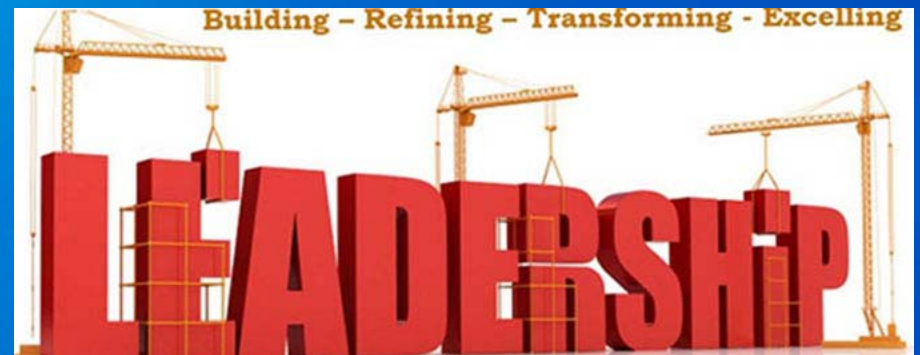
Short Term (1-2 years)

#6



*Resource  
Appropriately*

It is recommended that...HRM Planning dedicate resources to enable these solar recommendations - hire a planner dedicated for 2 years to solar policy development and implementation.



- **Planning For Solar: Significant framework to enable economic development, homeowner savings**
- **As economic centre of Atlantic Canada, HRM Leadership vital**
- **Short term – will take 2 years to fully implement**

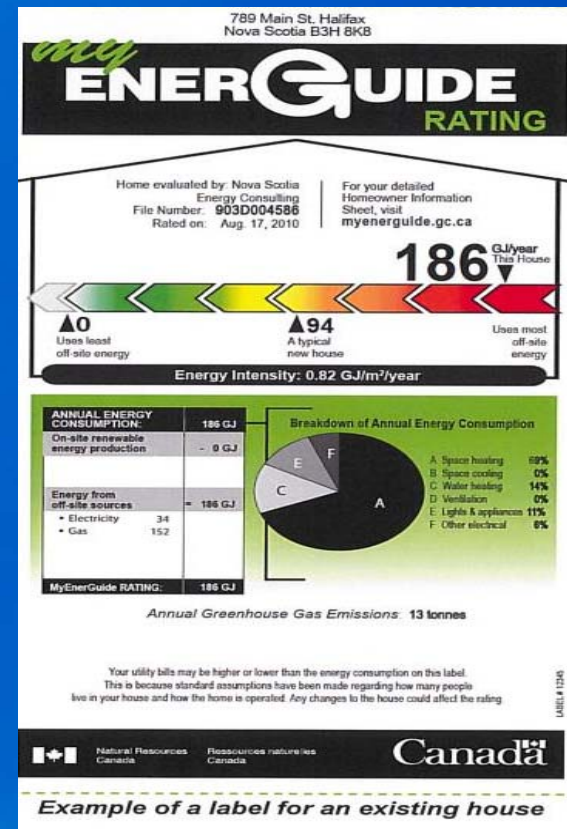
# Summary of Recommendations

Mid Term (2-5 years)

#7

*Energy  
Labels*

It is recommended that...HRM and the Province of Nova Scotia launch a program for homes to obtain an energy rating and label at the point of sale to encourage energy literacy as well as promoting the value of solar.



**QUEST**

Quality Urban Energy  
Systems of Tomorrow

# Summary of Recommendations

Mid Term (2-5 years)

#8



*Solar Ready Bylaw*

It is recommended that...HRM create a solar ready bylaw and policies that mandate new construction solar readiness in both residential and commercial buildings in HRM.



- 36 Communities in BC have already done this.
- Many jurisdictions have gone beyond just “solar ready” and mandated solar systems

# Summary of Recommendations

Mid Term (2-5 years)

#9

***Nova Scotia Solar Act***

**It is recommended that...HRM work with the Province of Nova Scotia to explore legislation, policies and other approaches to promote solar such as solar access rights, promoting solar orientation of residential and commercial buildings in the province, property tax assessment exemptions for solar, collaborating on a new Provincial Solar Act.**

# Summary of Recommendations

Long Term (5+ years)

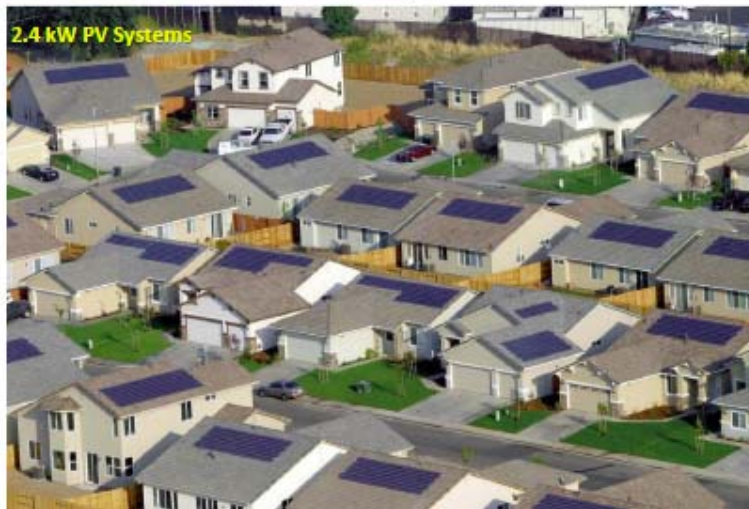
## #10

It is recommended that...HRM adopt a VISION for solar.

*A Solar Vision for  
HRM*



- Opportunity to engage the public
- Plan for an exciting future with solar energy in the landscape



Thank you, questions?

