

# Sun for Food Solar Panel Install

Proposal to IFM Board of Directors

# Background Information

- IFM electricity usage
  - 34,900 Kwh at a cost of \$7K per year
  - Projected to increase 4-5% per year
- Year End Cash Position
  - 2015 exiting cash position is projected at @\$260K
  - IFM's cash guideline is to maintain no less than 3 months and no more than 6 months of cash
  - Excess cash can be used for paying down the USDA loan or special project

# Solar Installation Costs

- 3 bids for the work have been completed
  - DC Solar - \$65-70K (Baseline for board proposal)
  - Beam - \$104K
  - Plan-It Solar - \$66K
- In addition to the solar equipment the following other costs will be incurred with the project
  - Roof membrane sealing/repair - \$8-10K
  - Possible structural requirements – pre-estimate - \$10K
  - Tree trimming and removal - \$2K
  - Structural review - \$1K

# Total Project Summary (Baseline)

Solar equipment contract	\$65-70K
Roof membrane sealing/repair	\$8-10K
Structural requirements	\$10K
Tree trimming and removal	\$1.5-2K
Structural review	\$1K
Contingency (7%)	\$7K
Grand Total for Project (high side)	\$100K

# Financial Analysis

- NPV Comparisons (25 year life)
  - \$124K without grants
  - \$156K with projected USDA 35% grant
  - \$27K to pay down the USDA loan
  - Breakeven is 10-11 years without grants
- IFM plans to stay in this building for a long time and we own it – otherwise we would not be pursuing this project
- All benefit from the project will be used to reduce other IFM expenses (primarily food)

# Non Financial Benefits

- Reduction of green house gas emissions by **476 tons** of CO2 over 25 years

Equivalent CO2 Reductions

Small Car – 1,612,542 miles

Air Miles – 980,825 miles

Trees Planted – 19,028

- Future avoidance of future roof maintenance costs
- Roof membrane installation would keep our building cooler in the summer
- IFM is seeking to not only reduce (**Sun** for **Food**) costs but also supporting our environment

# Community Concerns

- Aesthetic impact to some neighboring residents
  - Bob has been in contact with the neighbor who owns the property behind IFM
    - No issues with regard to view and he is OK with the project
- There may be some members in the community that feel that the project is a waste of money and that the money would be better spent on food (grants could help mitigate this)

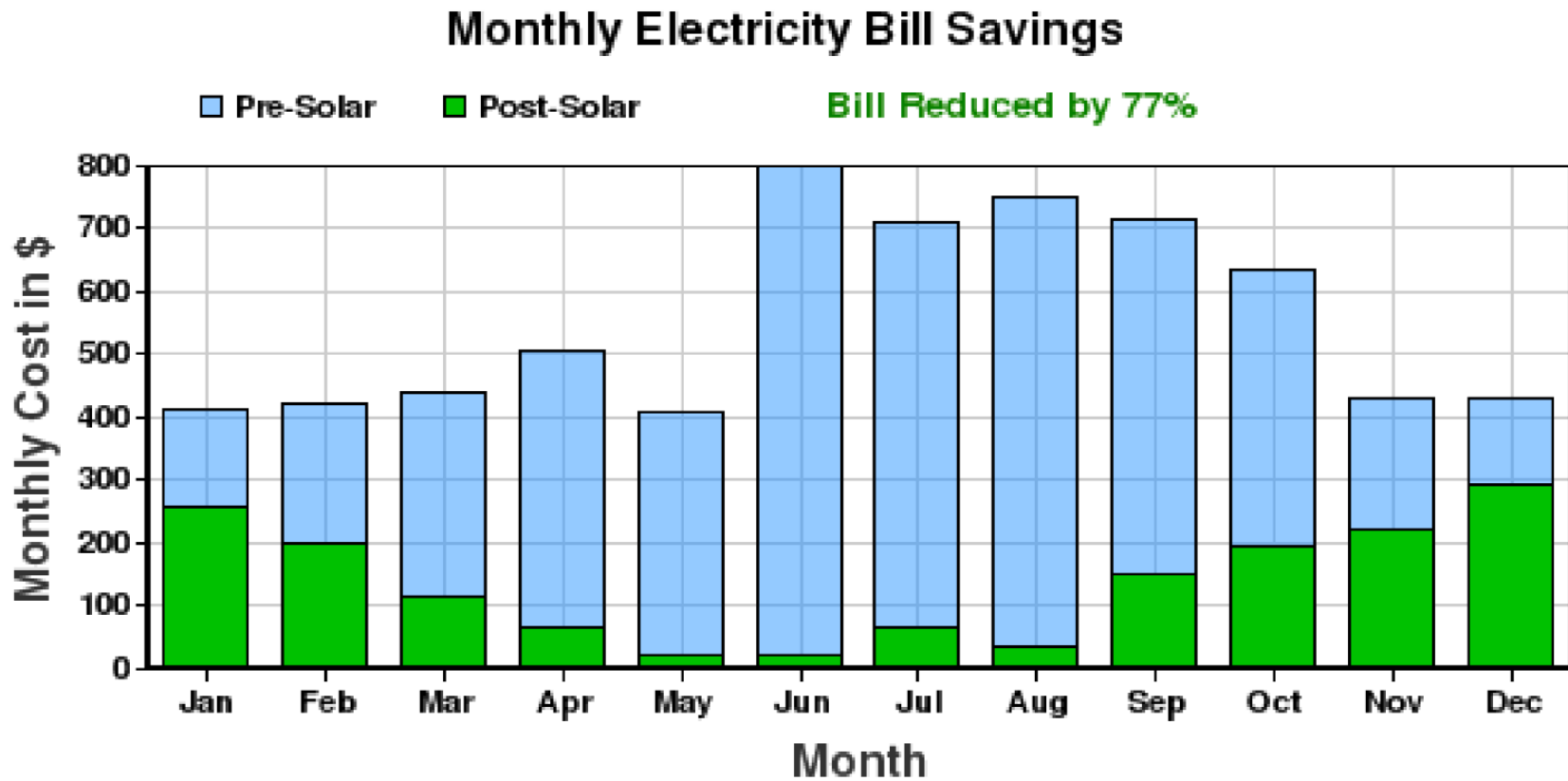
# Solar Equipment & Install Details

- Panels with 25 year warranty
- Inverters with 15-20 year warranty
- Solar contractor to handle
  - Basic Engineering (not structural)
  - Permitting
  - Construction
  - Maintenance

Note: # of panels and inverters (configuration) to be determined once a vendor has been selected



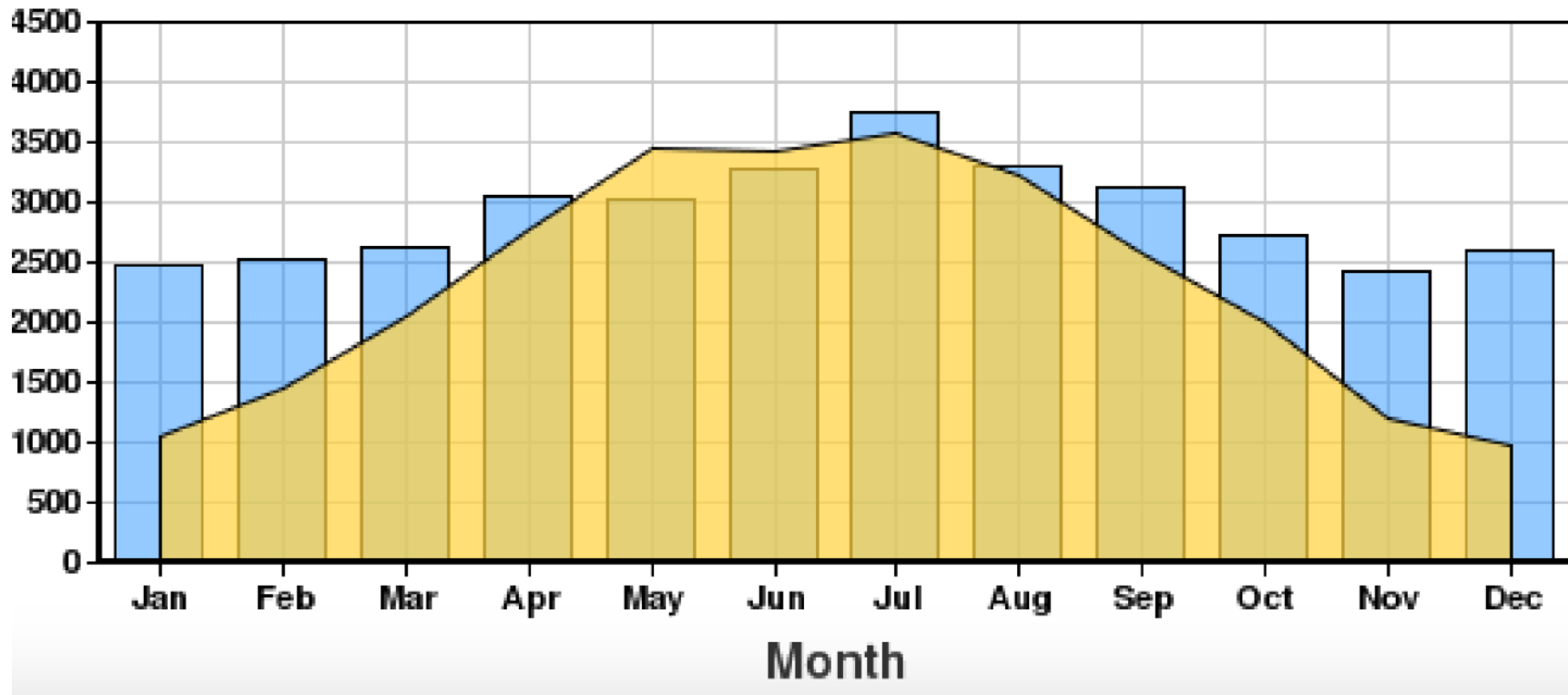
# Pre and Post Energy Usage



# Solar Production

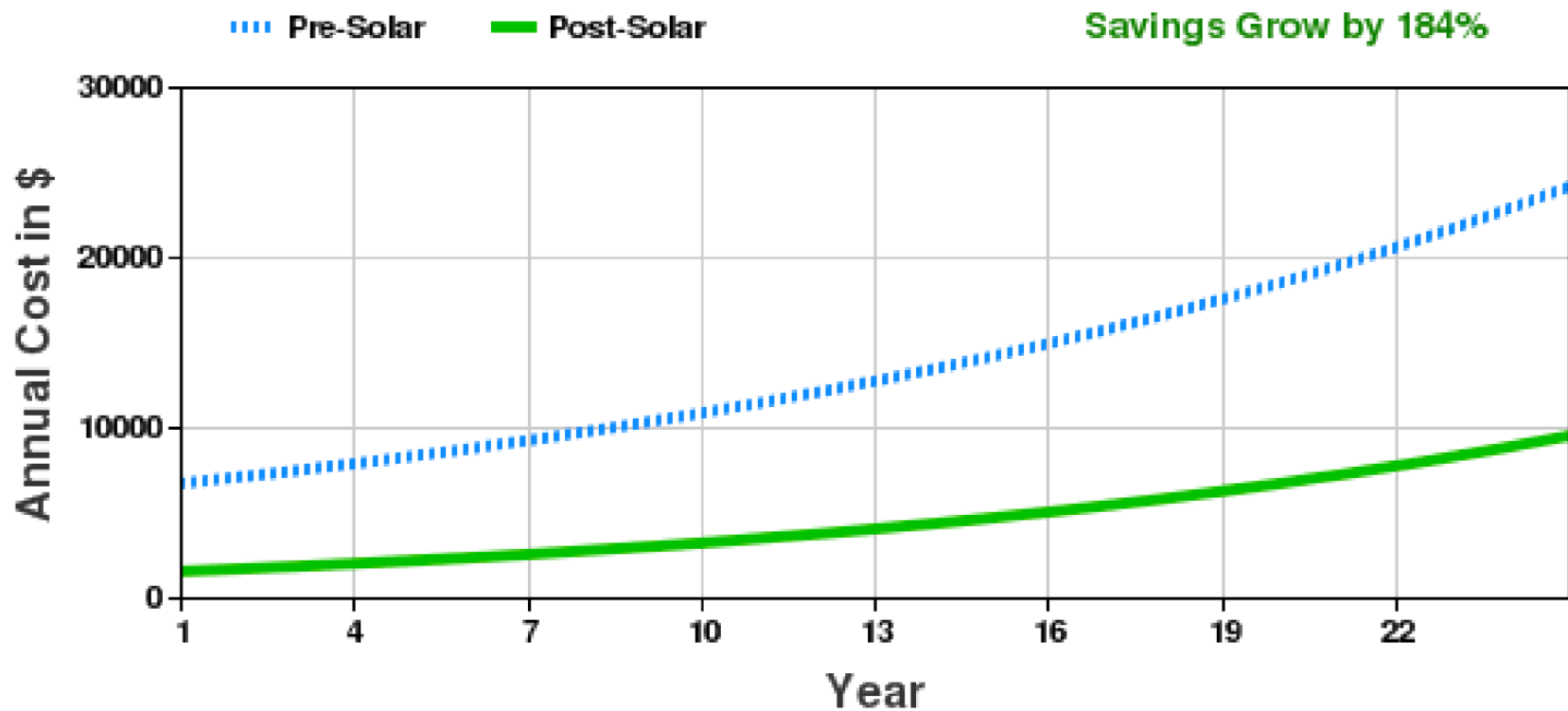
## Monthly Electricity Use and Amount Supplied by Solar

■ PV Production    ■ Energy Use    80% of Usage Supplied by Solar



# Annualized Savings

## Annual Electricity Bill Savings Over Time



# Resolution Recommendation

- Pursue installation of solar **EVEN** if we are not successful in obtaining grants to offset some of the cost
  - IFM to spend up to \$100K on solar (includes contingency of 7% or \$7K)
  - Grant Committee is approved to pursue up to 3 grants to offset the cost to install solar (USDA, and two other (longer shot at obtaining))
  - IFM **Sun** for **Food** event could be used to generate solar funding

# Key Points to Remember

- The Sun for Food Project will:
  - Reduce electrical/operational expenses
  - Allow IFM to purchase more and/or healthier foods for our clients
  - Is a great investment that will earn much, much more than any savings account could
  - Supports our environment

Questions?

**Vote**