

The background of the slide is an aerial photograph of Cape Cod, Massachusetts, showing the coastline, water, and land.

Tomorrow is Happening Now:

Challenges & Opportunities Facing Solar Energy on Cape Cod

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Agenda Topics



How Solar Works



Challenges Facing Solar



Opportunities for Solar on Cape Cod

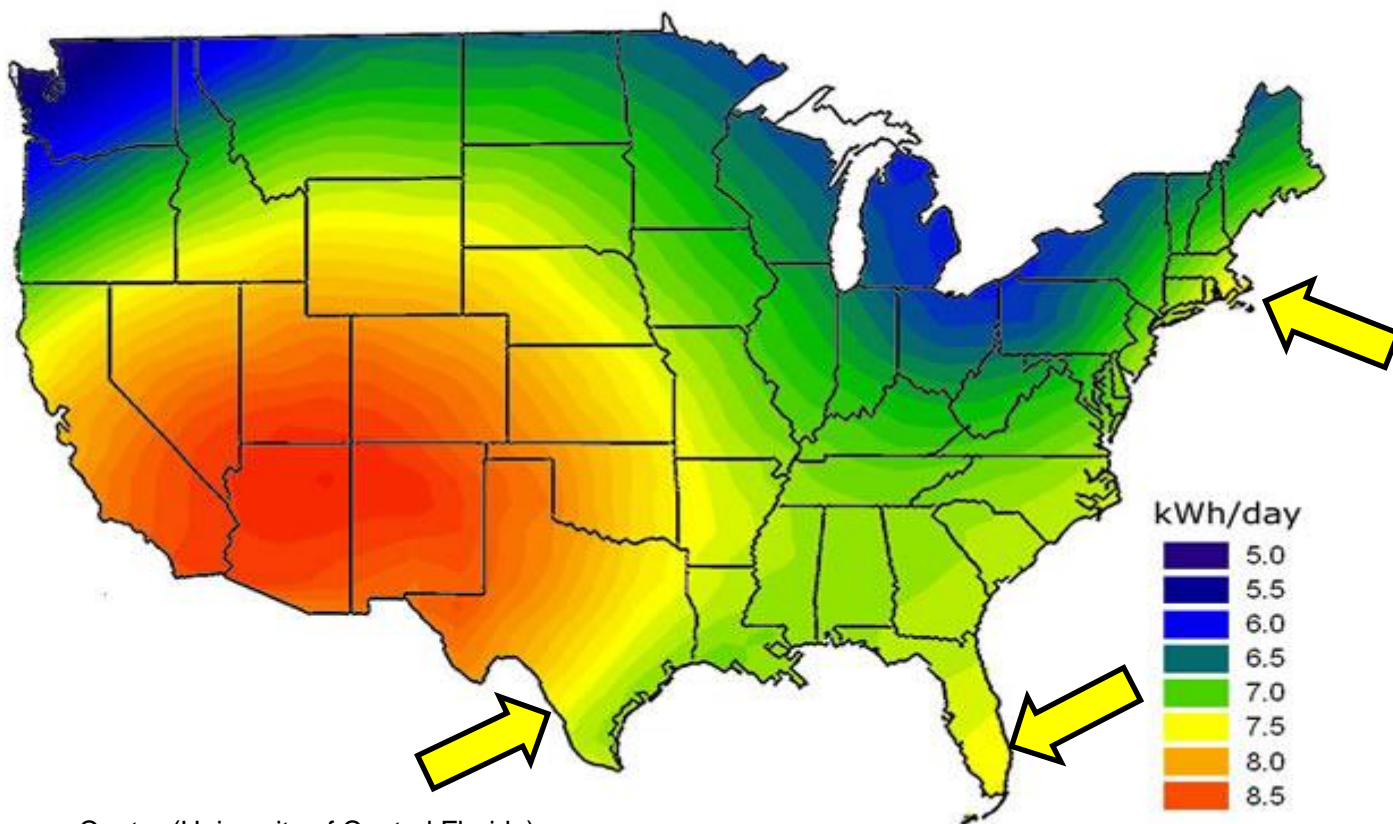


Questions

Solar in the Northeast

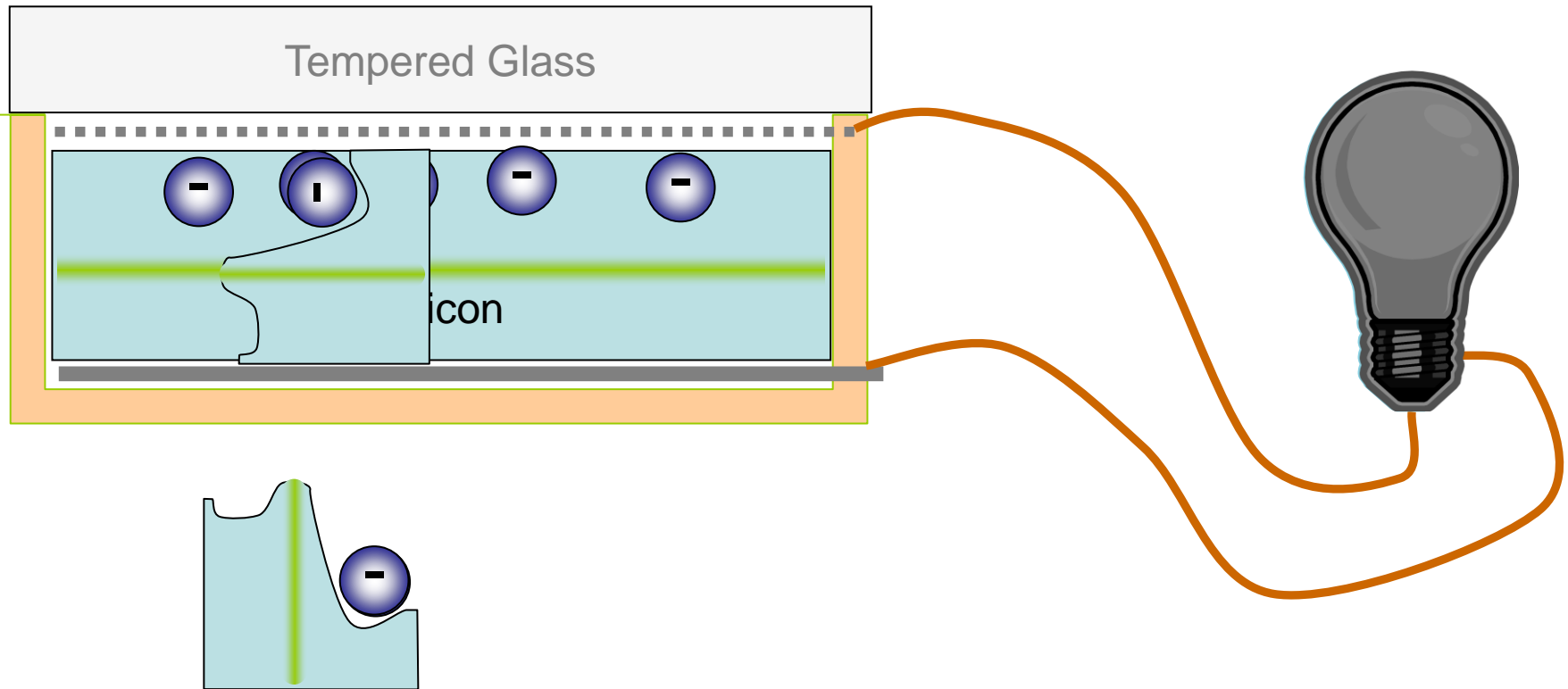
Does Solar Make Sense on Cape Cod?

Did you know that we are the solar capital of the Northeast?

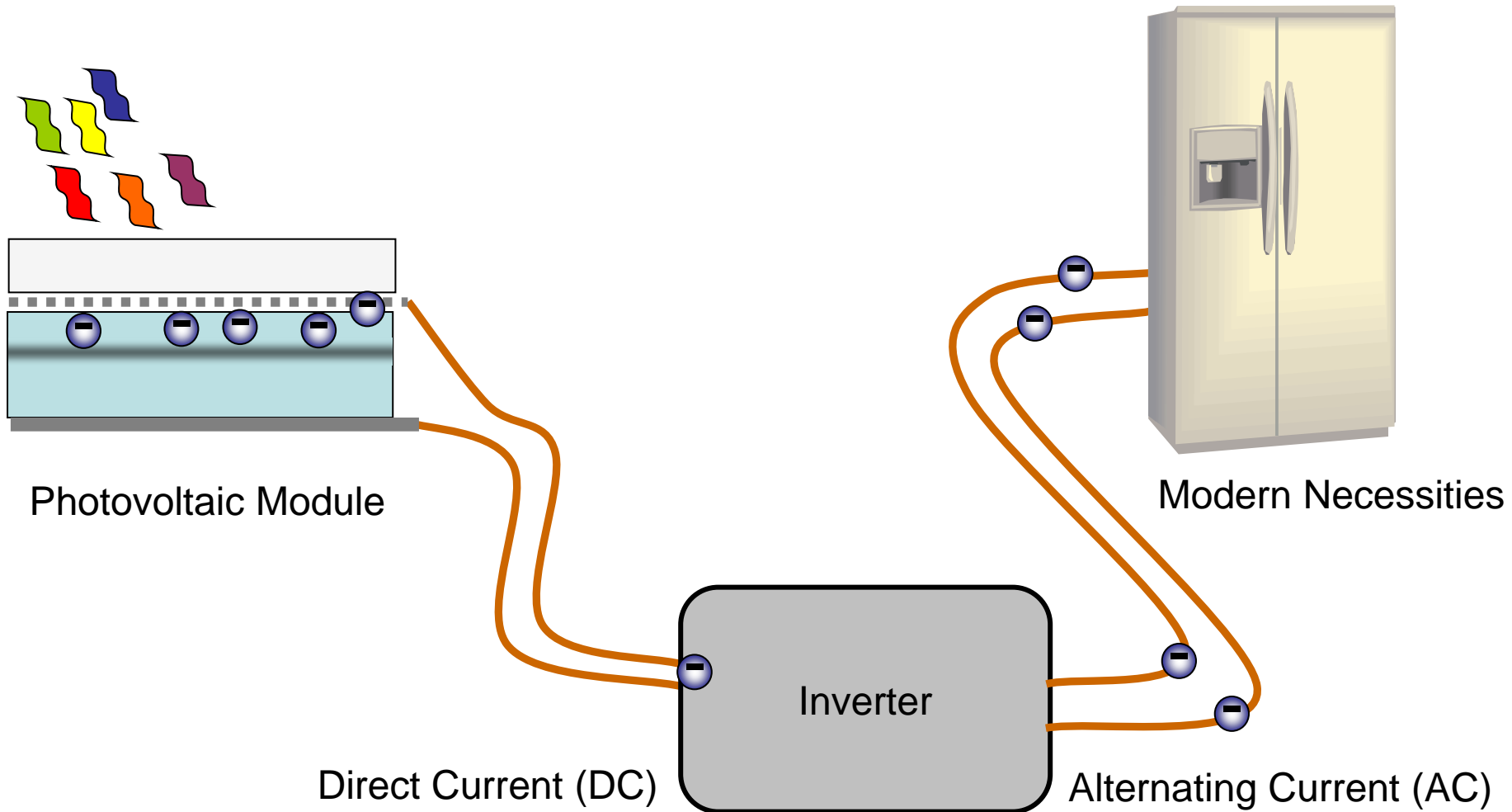


Source: Florida Solar Energy Center (University of Central Florida)

How Does Solar Work?



How Does Solar Run My House?



What is Net Metering?

Use electricity

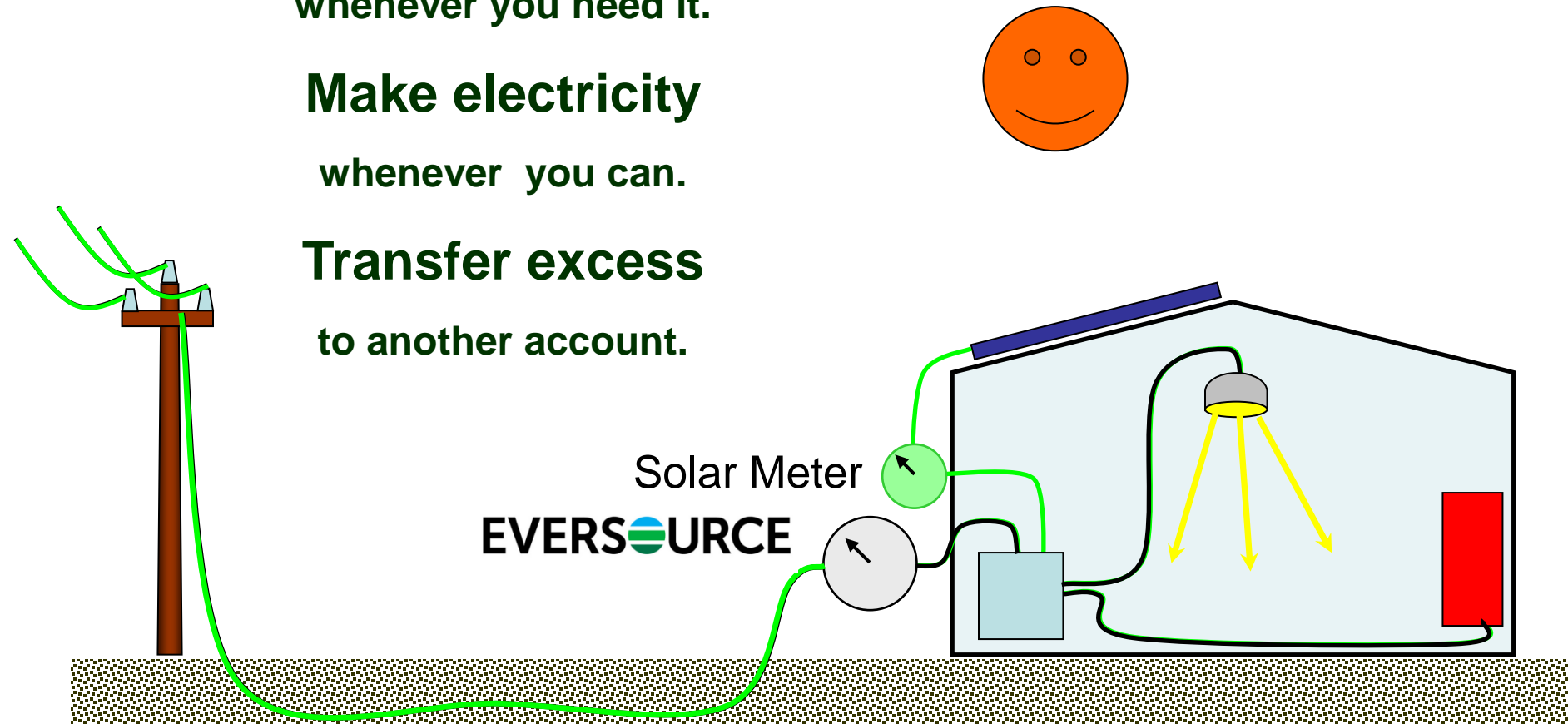
whenever you need it.

Make electricity

whenever you can.

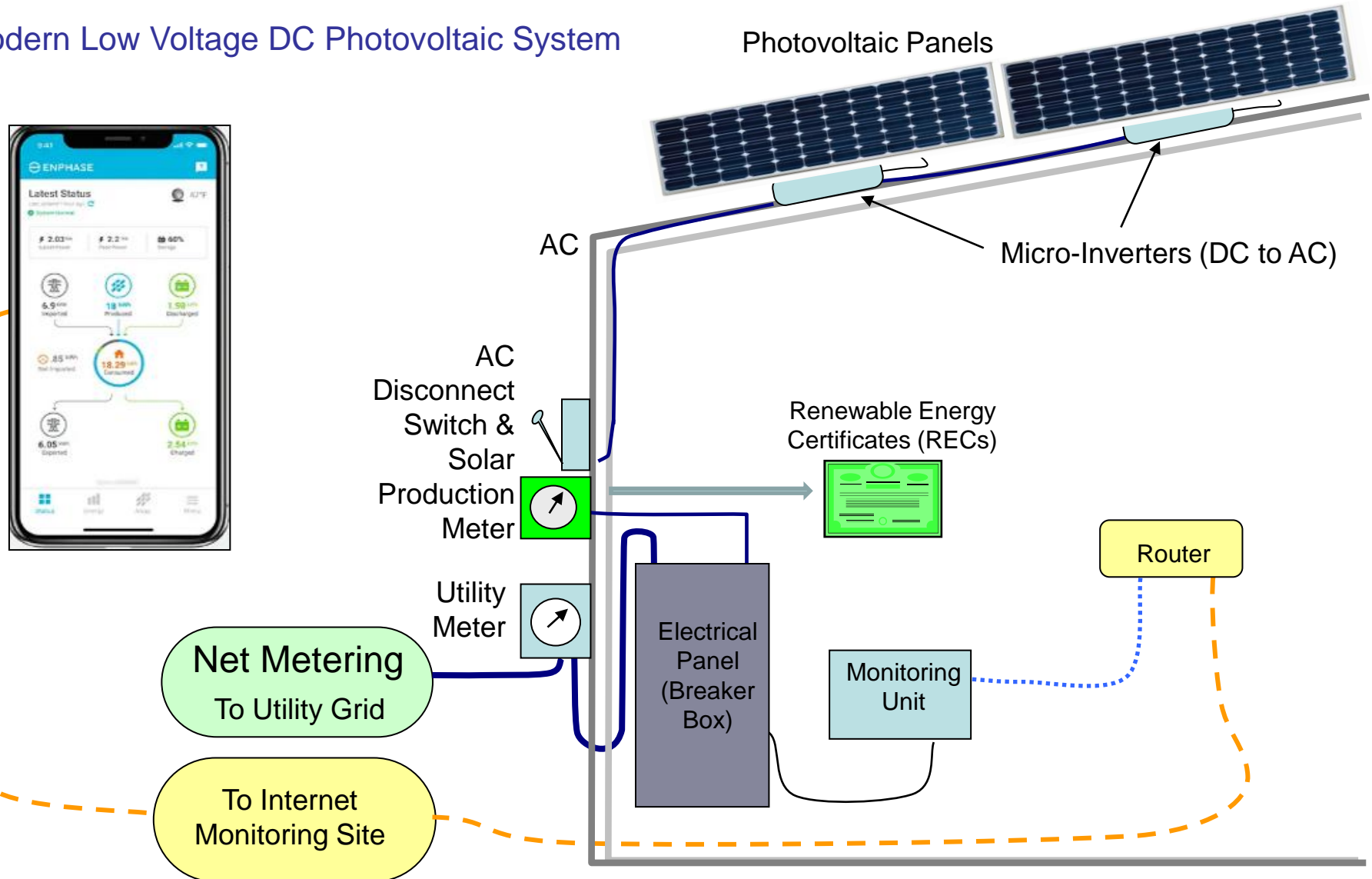
Transfer excess

to another account.



Project Design & Components

Modern Low Voltage DC Photovoltaic System





Challenges Facing Cape Cod

Challenges Facing Cape Cod

Getting Historic Approval for Solar



- Different policies for different towns
- The Historic Business District Commission (HBDC) in Chatham is better about approving solar, unlike Old King's Highway.
- Dwellings that are not considered historic still get rejected by the historical commission

Challenges Facing Cape Cod

Permitting/Interconnection



- New setback restrictions
 - Inconsistency with policy interpretation
- Utility regulations & Interconnection
 - No DPU oversight
 - Transmission/Impact Studies & Capital Improvement delays

Challenges Facing Cape Cod

Cost of living

- Housing
- Wages
- Childcare
- Decreased supply of talent



Financing

- Interest rates
- National solar leasing companies
- Nontransparent financing structures





Opportunities for Cape Cod

Opportunities: Financial Payback

System Description (# Modules)	24
Watts (DC)	10200
Price	\$35,190.00
Estimated State Tax Credit	\$1,000.00
Estimated Fed Credit	\$10,557.00
Effective Price after Tax Incentives	\$23,633.00

- The **fixed** electrical rate of \$0.335 per kWh
- The current REC value of \$0.035 per kWh
- We are not financial or tax advisors

Opportunities for Cape Cod

Whenever Possible...Buy Local

- Working Within the Community
- Keeping Energy dollars local
- More Than a Transaction:
Providing jobs
- Community Investment
- Solar helps combat climate
change on Cape Cod
- Help utility meet additional
demand and the electrification
of Cape Cod



Residential Projects



Residential Projects



Ground-mount projects

Commercial Projects



Commercial Projects



Mid-Scale Ground-Mount Facilities First Parish Brewster Solar

112 panels on an open lot

Commercial Projects



Large-Scale Ground-Mount Facilities

Airport Way Solar

September 27, 2012

5712 panels on 5 acres