

# Third-party Financing of Solar on College and University Campuses

*Co-convened by U.S. EPA's Green Power Partnership and Second Nature*



*Higher Education Webinar Series  
December 13, 2012  
3:00 – 4:00 p.m. EST*

# Today's Panelists

- Blaine Collison, Program Director, Green Power Partnership, U.S. EPA
- Ben Foster, SVP, Optony Inc.
- Chris O'Brien, Director of Sustainability, American University



# Partnership Between Second Nature & U.S. EPA

- Why are we Partnering?
  - Shared interest in promoting environmental stewardship, new sources of clean energy production, as well as helping ACUPCC signatories achieve climate neutrality.
- Objective of the Second Nature – EPA partnership?
  - Identify the barriers to expanding renewable energy use among colleges and universities, discover solutions, and provide education and training on green power procurement strategies.

To view Second Nature – EPA collaboration kick off webcast, go to YouTube and search “State of Renewables in Higher Education”.



# Potential Roles of EPA & Second Nature

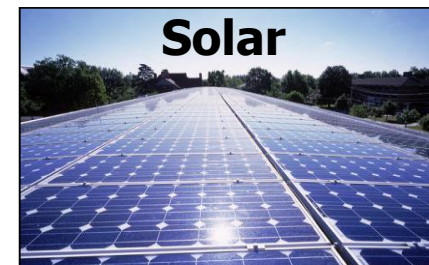
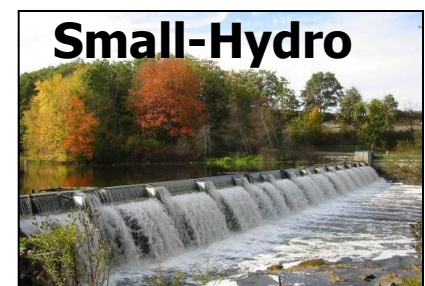
- Group convener and facilitator
- Build consensus on preferred procurement strategy(ies) for school or group of schools
- Match-maker between schools and renewable energy developers
- Assistance reviewing/developing RFIs/RFQs/RFPs
- EPA network of resources
- Example of best practices

# How Can You Help Us?

- Tell us what the barriers are that you have encountered in procuring green power?
- Share with your peers your lessons learned and best practices – we are happy to provide a platform such as a webcast.
- Tell us if you are interested and willing to lead a renewable energy buying group comprised of your peer institutions.
- Send us your RFI/RFP/PPA to use as examples on the EPA website

# What is Green Power?

- Electricity generated from natural resources that replenish themselves over short periods of time, including the sun, wind, moving water, organic plant and waste material (biomass), and the Earth's heat (geothermal).



# Green Power Procurement Options

- Renewable Energy Certificates (RECs)
  - The environmental “attributes” of electricity generated from renewable resources (1 REC = 1 MWh)
  - Attributes are based on the generation technology type and age, geographic location, and time of generation
  - Does not include the underlying electrons – “unbundled”
  - a.k.a. Green Tags, Renewable Energy Credits
- Green Power Electricity Products
  - Green power offered by utility suppliers that is all, or partially, generated from renewable sources
  - “Bundled” product that includes both the RECs as well as the underlying electrons
- On-site Generation
  - Install a renewable energy system on-site (e.g. solar panels, wind turbine)
  - Produces both electricity and RECs from the on-site source
  - Self-financed installation or via a third-party PPA
  - To claim “use” of green power, host needs REC ownership



# Value Proposition of Renewables for a College Campus

- Meet environmental objectives
  - Sustainability goals
  - GHG reduction targets
  - American College & University Presidents' Climate Commitment
- Manage risk
  - Reduce exposure to fossil-fuel price volatility
  - Deploys quickly & scales up easily
- Drive economic development
  - Higher ed commitments are financeable
  - Domestic energy supply
  - New U.S. jobs
- Enhance school brand
  - Prospective students
  - Host communities
  - Peer institutions
- Attract & retain students
  - Sustainability and green power is a hot topic on campus
- Incorporate green power into research initiatives & curricula



## Did you know.....

- 79% of colleges and universities have conducted a GHG inventory.
- 64% of colleges and universities have made a carbon reduction commitment.

Source: 2011 College Sustainability Report Card



# Opportunities in Green Power Space for Higher Education Institutions

## Unique Properties of Higher Education Institutions .....

- Engaged stakeholders
- Financial stability/credit-worthiness
- Focus on longer timeframes
- Large geographic footprint
- Role in civic society



## ....Offer Unique Opportunities with Renewables

- Large on-site renewable installations (owned or via PPA)
- Utility-scale off-site projects
- Collaborative purchasing
- Student purchasing for dorm rooms
- Development of new renewable technologies via research



# Examples of Barriers to Renewable Energy Adoption

## Green Power Purchase

- Power/REC cost
- Transaction cost
- Unfamiliarity with procurement options
- Comfort with REC concept
- Perceived barriers

## On-site Deployment

- Up-front capital costs
- Transaction cost
- Limited site availability/quality
- Outside of core competencies
- System performance risks
- Maintenance responsibilities

# Second Nature – EPA Webcast Series

- Upcoming Sessions....(We want your input!)
  - Utility-scale Wind PPA: Lessons Learned
  - Using Reverse Energy Auctions to Procure Green Power
  - Purchasing Groups: Best Practices

# Want to Know More?

- Basic Information
  - An overview of Green Power Partnership is available on EPA's website [www.epa.gov/greenpower](http://www.epa.gov/greenpower)
  - To learn how to enroll in the Partnership, visit: [www.epa.gov/greenpower/documents/gpp\\_partnership\\_agreement.pdf](http://www.epa.gov/greenpower/documents/gpp_partnership_agreement.pdf)
  - To see EPA's Green Power Purchasing Guide, visit: [www.epa.gov/greenpower/documents/purchasing\\_guide\\_for\\_web.pdf](http://www.epa.gov/greenpower/documents/purchasing_guide_for_web.pdf)
  - To see EPA's Green Power Locator, visit: [www.epa.gov/greenpower/pubs/gplocator.htm](http://www.epa.gov/greenpower/pubs/gplocator.htm)
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