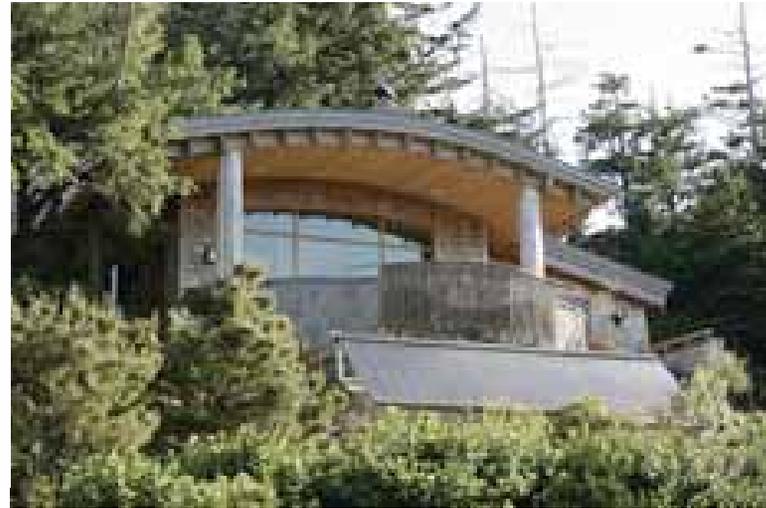


SOLAR EXPRESS

clean → renewable → bright



Chris Herman, Senior Program Manager for
Solar & Emerging Technologies
E-mail solarexpress@snopud.com



Environmental Commitment

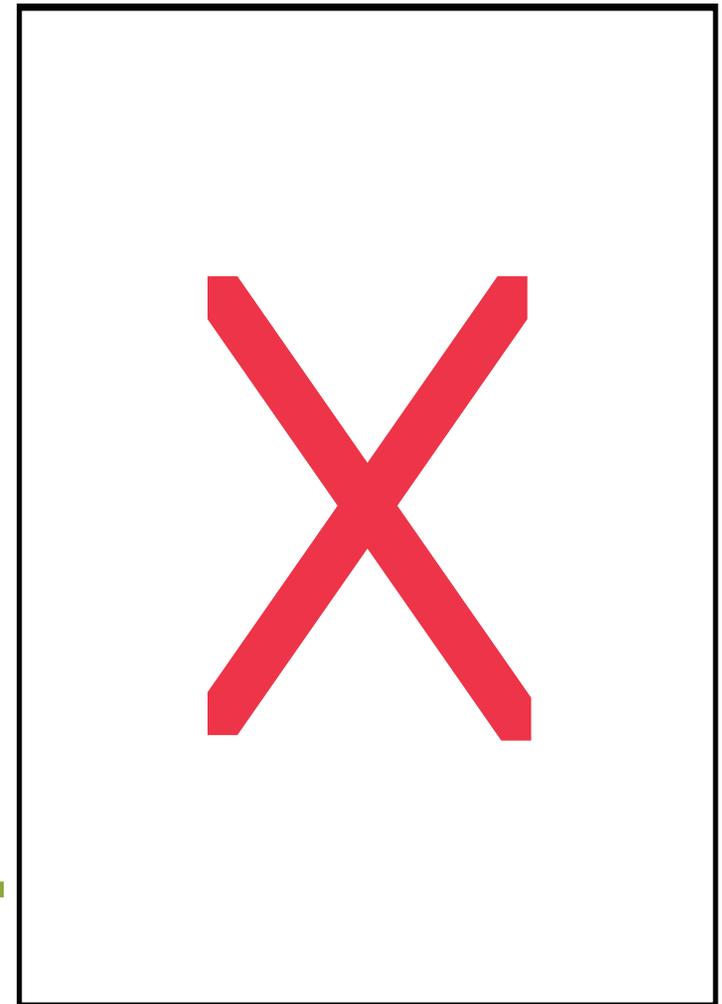
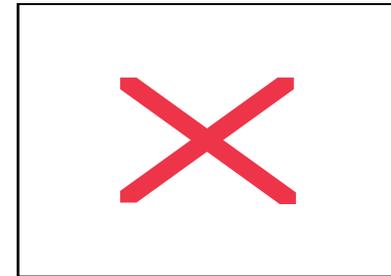
- ⇒ Minimize environmental impact through Climate Change policy
- ⇒ The PUD recycles ~70% of its total waste stream – everything from motor oil to office paper to batteries
- ⇒ Over the past 25 years, the PUD has:
 - ⇒ Conducted 90,000+ residential energy audits
 - ⇒ Weatherized 60,000+ homes
 - ⇒ Enrolled 3,400 customers in our Planet Power program

Planet Power

- ⇒ Program offers customers a voluntary option to fund local small-scale renewable projects through grants issued by PUD
- ⇒ Open to all PUD customers
- ⇒ Additional cost to normal electricity charges
- ⇒ Recently announced 5 projects selected through an RFP
 - ⇒ Cedar Wood Elementary School (*Mill Creek*)
 - ⇒ Snohomish High School
 - ⇒ Stanwood High School
 - ⇒ Snoqualmie Gourmet Ice Cream (*Maltby*)
 - ⇒ Mukilteo City Hall

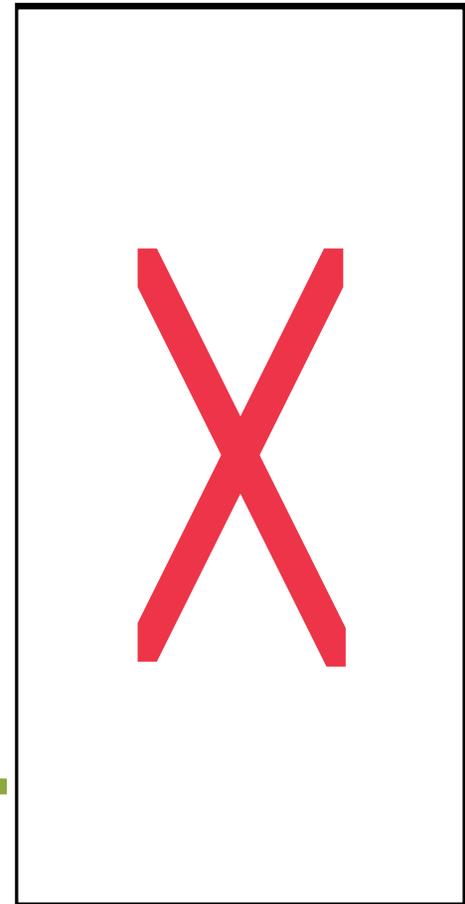
Tidal Power

- The PUD is studying 7 tidal power locations in and around the Puget Sound.
- The seven sites combined could provide as much as 100 aMW of energy – or enough power for about 70,000 residences.
- Currently, the only US tidal project is in New York City's East River



Geothermal Power

- PUD is moving forward with a detailed resource evaluation of geothermal generation
- Geothermal has the potential to be generated locally and carries minimal environmental impacts
- Viable sites could generate electricity at 7 to 10 cents per kilowatt-hour, plus transmission costs.



3 Basic Types of Residential Solar Energy Systems

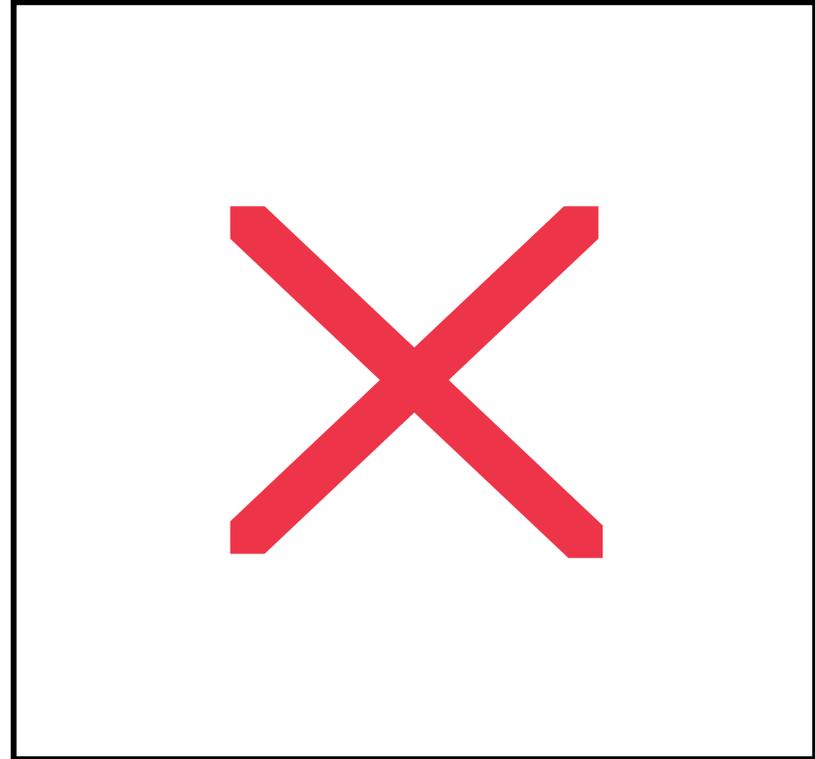
- ⇒ **Passive Solar** space heating, cooling and daylighting
- ⇒ **Solar Hot Water** and pool heating
- ⇒ **Solar Electric** - photovoltaics (PV)

The Solar Resource

- ⇒ 60% achievable savings for space heating
- ⇒ Pool heating season extended two months
- ⇒ Western Washington = 70% of the solar radiation of Los Angeles, for making electricity

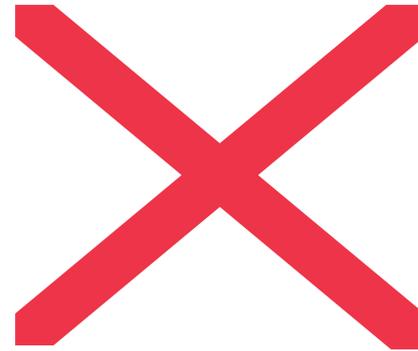
Cash Incentives for Photovoltaics

- ⇒ Available to **residential, commercial, industrial** and public customers
- ⇒ **Existing and new construction** buildings
- ⇒ Cash incentive of **\$500/kW**
- ⇒ Limit of \$2.5k residential, \$10k commercial



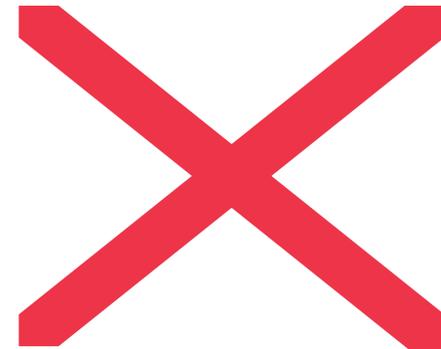
Cash Incentives for Solar Hot Water

- ⇒ Available to residential, commercial, industrial and public customers with **existing electric hot water systems**
- ⇒ Cash Incentive of **\$500/system**
- ⇒ No limit on number of systems



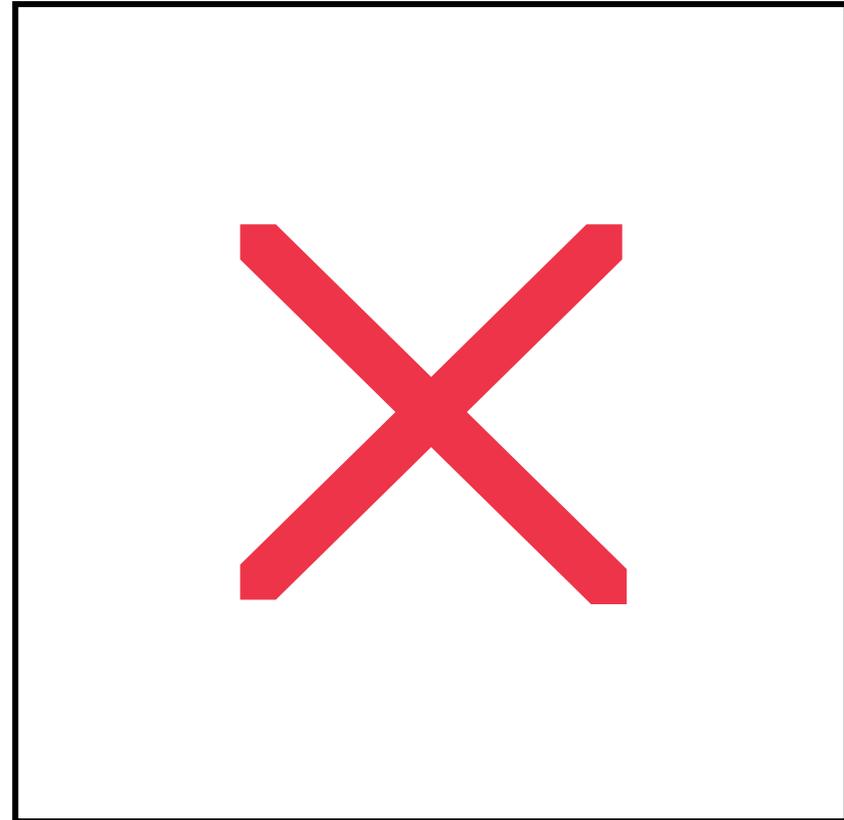
Residential Loans for Photovoltaics

- ⇒ 100% installed cost **up to \$25,000**
- ⇒ Loan Terms
 - ⇒ **2.9% APR**
 - ⇒ 10 year term
- ⇒ Cannot be combined with cash incentives



Residential Loans for Solar Hot Water

- ⇒ 100% installed cost **up to \$14,000**
- ⇒ Loan Terms
 - ⇒ **2.9% APR**
 - ⇒ 10 year term
- ⇒ Cannot be combined with cash incentives



State and Federal Incentives

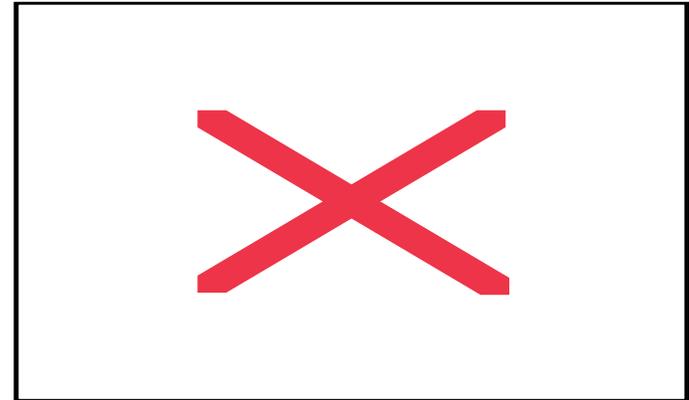
- ⇒ **Federal** in 2009-2016 Tax credit = 30% of system cost with no cap, for PV & Solar Hot Water
- ⇒ **State** sales tax exemption for equipment and installation through 6/30/09
- ⇒ Net metering – requires utilities to allow customers to hook up to power grid and spin meter backwards, up to annual usage
- ⇒ Green tag sales - \$.02/kWh for all production
- ⇒ 7/1/05 to 7/1/14 – premium approved for PV system's yearly AC production up to \$.54/kWh and \$2,000/year

Program Process

- ⇒ Customer obtains site assessment and bid
- ⇒ Submits application and documentation to PUD
- ⇒ PUD pre-inspection and energy assessment
- ⇒ Issue Approval to Construct
- ⇒ Installation and code inspection(s)
- ⇒ Notice of completion by Installer to PUD
- ⇒ PUD post-inspection
- ⇒ Net metering interconnection process (PV)
- ⇒ Payment to Customer or Installer

PUD Demonstration Project

- Located on the “Training Center” section of the electric bldg.
- 10kW PV system
 - 2 kW on the south wall of building (visible to PUD lot & Hewitt Av.)
 - 8 kW on the roof
- Kiosk with live data in the lobby area, plus on www.snopud.com
- PV system (6/09) and kiosk (7/09) installations complete



For More Information Please Call or Visit

ENERGY HOTLINE

425-783-1700 or 1-877-783-1000 ext. 1700
Monday-Friday 8am–5pm

FOR SOLAR APPLICATIONS PLEASE VISIT

www.snopud.com/solarexpress

or please email questions to

solarexpress@snopud.com

