United States Representative Gabrielle Giffords

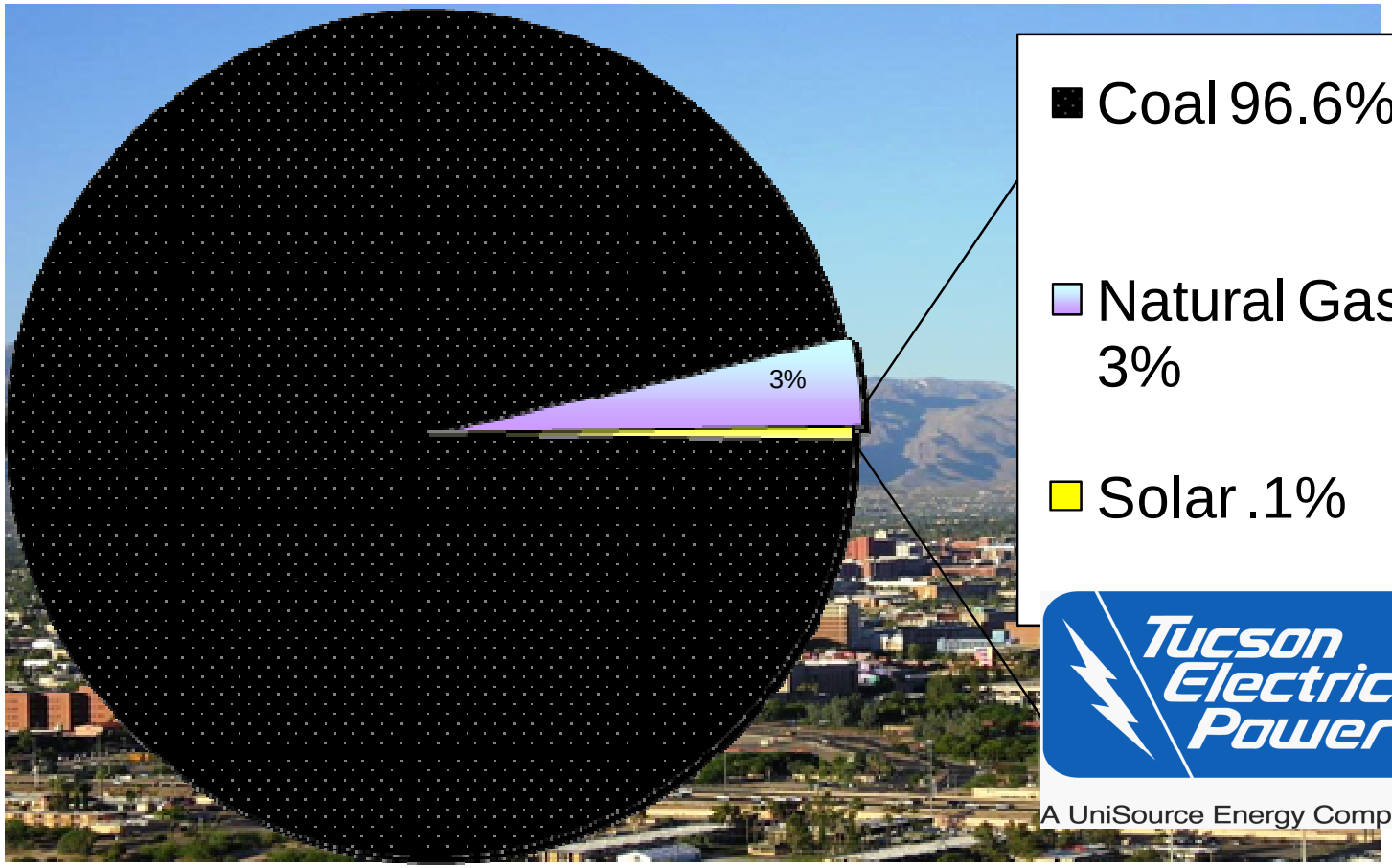
Presents

Solar Power for the Home: Getting Started

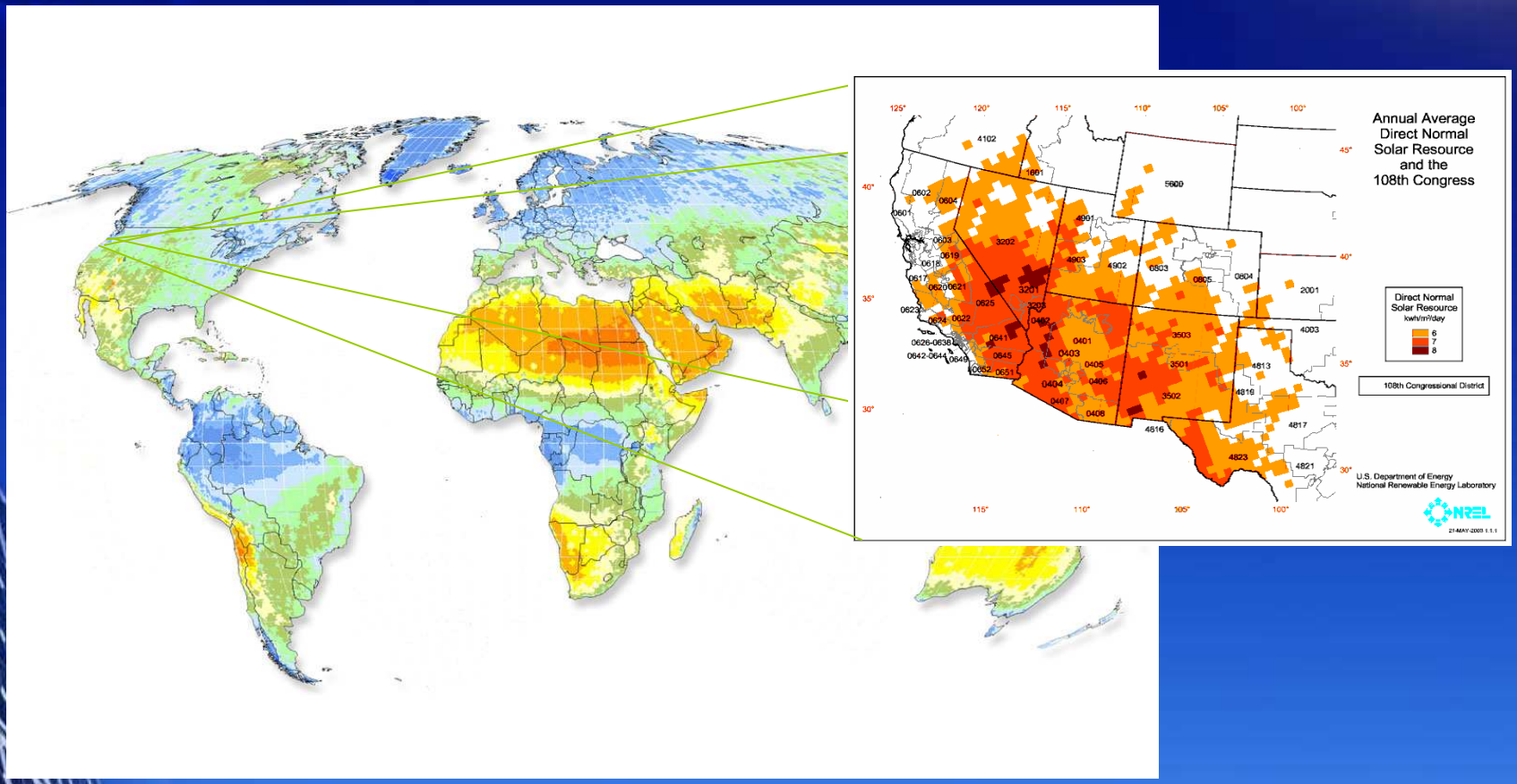
www.Giffords.House.gov

The 8th District of Arizona

Tucson Energy Sources



“World Class” Solar Resources



Home PV Systems

- One kilowatt-hour (kWh) equals the amount of electricity needed to burn a 100 watt light bulb for 10 hours
  - Takes ½ -1 Gallon of water and 1 lb of coal to produce 1 KWH
- The average household in the United States uses about 11,000 kilowatt-hours of electricity each year
  - 11,000 lbs of coal
  - Over 20,000 lbs of C02 added to the atmosphere
  - 6-11,000 gallons of water
- A typical 3 kilowatt Solar System will generate around 5,000 kilowatt-hours per year
  - Zero lbs of coal and C02 and no water!

Solar Hot Water

- Low up front cost – about $5,000
- TEP Rebate – up to $1,750
- Tax credits – state and federal
- 3-5 year payback

Steps for Homeowners

- Find a good installer
- Site visit
- Contact your HOA
- Permit from City or County
- Interconnection agreement with utility
- Apply for utility rebate
- Installation
- Inspection by City or County
- Inspection by utility
- System operational
- Receive utility rebate

- This can take 6 – 10 weeks

Economic Incentives

Federal Incentives

Residential Solar Electric:

- 30% tax credit
- no cap (starting January 1, 2009)

Residential Solar Hot Water:

- 30% tax credit
- $2,000 cap

Commercial Solar Electric:

- 30% tax credit
- No cap
- 5-year accelerated depreciation

Economic Incentives

State Incentives

- ***Residential Solar Electric and Hot Water:***
  - **25% tax credit**
  - **$1000 cap**
  - **No state retail tax**
  - **One time use per residence**
- ***Commercial Solar Electric:***
  - **10% tax credit**
  - **$25,000 cap per system and $50,000 per company annually**

Sample Price Chart for Residential Solar PV - *2009*

System Size in DC	Actual Output in AC	KWh Per Year	Total System Cost (before incentives)	TEP Rebate ($3,000 per kilowatt in DC)	State Tax Credit (25% of system cost, up to $1,000)	Federal Tax Credit (30% of system cost, minus state & utility incentives)	Estimated Project Cost
1.52 KW = 1520 Watts	1.08 KW = 1080 Watts	2562	$13,081	-$4,560	-$1,000	-$2,256	$5,265
2.47 KW	1.75 KW	4163	$18,423	-$7,410	-$1,000	-$3,004	$7,009
3.04 KW	2.16 KW	5124	$21,388	-$9,120	-$1,000	-$3,380	$7,887
4.56 KW	3.24 KW	7686	$30,254	-$13,680	-$1,000	-$4,672	$10,902
6.08 KW	4.32 KW	10248	$40,023	-$18,240	-$1,000	-$6,235	$14,548
6.84 KW	4.86 KW	11530	$44,514	-$20,520	-$1,000	-$6,898	$16,095
8.55 KW	6.07 KW	14412	$54,434	-$25,650	-$1,000	-$8,335	$19,448

Congresswoman Gabrielle Giffords enjoys a hot dog cooked in a solar oven! July 5, 2007

GreenWatts

www.greenwatts.com

An affordable way to support generating ‘green’ power

- Customers can “adopt” a GreenWatt by adding a contribution on their electric bill.
- Funds collected pay for donations of PV solar for schools and nonprofits.

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