

	B	C	D	E
2				
3	Information			Source
4				
5	Total Residences in Sacramento County	502095	Units	State of CA Finance Dept, 2008
6				
7	% of Homes w/ fireplace	31%		Aurora, 2007
8	% of Homes w/ fireplace that burn wood	63%		Aurora, 2007
9	% of Homes that burned that burned cord wood	80%		Aurora, 2007
10	% of Homes w/fireplace that burn wood for heat	31%		Aurora 2007
11	% of Homes w/fireplace that burn wood for aesthetic	69%		Aurora, 2007
12	% of Homes that used fireplace and burned Manf. Logs	20%		Aurora, 2007
13	% of Homes w/ wood stove	5%		Aurora, 2007
14	% of Homes w/ wood stove that are Phase II certified	43%		Houck, 2003
15	% of the Phase II wood stoves that are catalytic	17%		Houck, 2003
16	% of Homes w/ stove that burn	63%		Aurora, 2007
17	% of Homes w/ wood insert	16%		Aurora, 2007
18	% of Homes w/ wood insert that are Phase II certified	45%		Houck, 2003
19	% of the Phase II wood inserts that are catalytic	50%		Houck, 2003
20	% of Homes w/ inserts that burn	63%		Aurora, 2007
21	% of Homes w/ insert that burn wood	87%		Aurora, 2007
22	% of Homes w/pellet stove	3%		Aurora, 2007
23	% of Homes w/pellet stove that burned	63%		Aurora, 2007
24				
25				
26	Average Wood Usage Per Household that burns wood (heat)	0.656	cord/home	Houck, 2001
27	Average Wood Usage Per Household that burns wood (aesthetic)	0.069	cord/home	Houck, 2001
28	Average Manufactured Log Use Per Household that burns wood	19	Log/yr	Houck, 2003
29	Average Wood Use Per Household that burns wood (stove)	1.5	cord/home	Houck, 2003
30	Average Wood Use Per Household that burns wood (insert)	1.2	cord/home	Houck, 2003
31	Average Pellet Use Per Household that burns wood	4000	lb/yr	Houck, 2004
32				
33	Percent of Wood that is Purchased	51.4%		Houck, 2003
34				
35	Heating Value of Wood	6,050	Btu/lb	Representative of Certified Units
36	Heating Value of Manufactured Log	15,700	Btu/lb	Houck, Wax-Sawdust Firelogs
37				
38	Uncontrolled Fireplace EF	23.6	lb PM ₁₀ /ton of wood	Pechan, 2006
39	Uncontrolled Stove/Insert EF	30.6	lb PM ₁₀ /ton of wood	AP 42 1.10
40	Controlled (non-catalytic) Stove/Insert EF	14.6	lb PM ₁₀ /ton of wood	AP 42 1.10
41	Controlled (catalytic) Stove/Insert EF	20.4	lb PM ₁₀ /ton of wood	AP 42 1.10
42	Manufactured Log EF	29.4	lb PM ₁₀ /ton of log	Li, 2006
43	Pellet Stove EF	3.06	lb PM ₁₀ /ton of wood	Houck, 2006 (MARAMA)
44	Wood Smoke PM2.5/PM10 Fraction	0.96		CARB Estimate
45	NG PM10 EF	0.007	lb/MMBtu	AP 42 1.4
46	NOx EF Fireplace	2.6	lb/ton of wood	AP 42 1.9
47	NOx EF Uncontrolled Stove	2.8	lb/ton of wood	AP 42 1.9
48	NOx EF Phase II Stove	2.0	lb/ton of wood	AP 42 1.9
49	NOx EF Pellet Stove	3.8	lb/ton of wood	Houck, 2006 (MARAMA)
50	CO EF Fireplace	128.0	lb/ton of wood	2002 NEI, Pechan, 2006
51	CO EF Uncontrolled Stove	230.8	lb/ton of wood	AP 42 1.10
52	CO EF Phase II Stove	140.8	lb/ton of wood	AP 42 1.10
53	CO EF Pellet Stove	15.9	lb/ton of wood	Houck, 2006 (MARAMA)
54	VOC EF Fireplace	229.0	lb/ton of wood	AP 42 1.9
55	VOC EF Uncontrolled Stove	53.0	lb/ton of wood	AP 42 1.10
56	VOC EF Phase II Stove	12.0	lb/ton of wood	AP 42 1.10
57	VOC EF Pellet Stove	0.04	lb/ton of wood	Houck, 2006 (MARAMA)
58				
59	Thermal Efficiency Fireplace	7%		Houck, 1998
60	Thermal Efficiency Certified Stove/Insert	63%		Representative of Certified Units
61	Thermal Efficiency NG Fireplace	75%		Houck, 1998
62				
63	Incremental Cost to install Certified Fireplace Insert	\$ 2,500.00		John Crouch, HPBA
64	Incremental Cost to install NG Fireplace Insert	\$ 3,000.00		Staff Survey
65	Incremental Cost to install Gas Log set	\$ 300.00		Staff Survey
66				
67	Cost of Wood (\$/per Cord)	269.00		ERG, 2009
68	Cost of Manufactured Log (\$/per Log)	5.00		ERG, 2009
69	Cost of Pellet (\$/per Bag)	6.88		ERG, 2009
70	Cost of NG (\$/MMBtu)	10.91		Staff Survey
71	Cost of Electricity (\$/kWh)	0.09		Staff Survey
72				
73	Burn Rate of Wood in Fireplace	6.60	lb/hr	Houck, 1998
74	Burn Rate of Manufactured Log in Fireplace	3.00	hr/log	Houck, Wax-Sawdust Firelogs
75	Median Burn Rate Certified Fireplace Insert	3.16	lb/hr	Representative of Certified Units
76	Heat Input Rate NG Insert	30,000	BTU/hr	Staff Survey
77				
78	Weight of an Average Cord of Wood	1.54	ton/cord	Houck & Eagle, 2006
79	Weight of Manufactured Log	5.00	lb/log	Broderick, 2003
80	% of Fuel Burned in November through February	69.1%		CARB Inventory Methodology