



# Appendix C:

## Data Inputs

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**RIVERSIDE COUNTY**  
**Greenhouse Gas Emission Inventory**  
**Annual Usage and Generation**

|                 |         |         |
|-----------------|---------|---------|
| Inventory Year: | 2008    |         |
| Growth Rates    | to 2020 | to 2035 |
| Residential     | 62.41%  | 92.55%  |
| Non-Residential | 96.10%  | 165.12% |

**Transportation**

**On-road Transportation**

|                               |               |
|-------------------------------|---------------|
| Annual Vehicle Miles Traveled | 5,161,531,679 |
| Annual Residential Trips      | 590,542,591   |
| Annual Non-Residential Trips  | 271,942,936   |
| Average \$/gallon Gasoline:   | \$3.56        |
| Average \$/gallon Diesel:     | \$3.93        |

**Aviation**

|               | Annual Gallons | \$/gallon |
|---------------|----------------|-----------|
| Jet Fuel      | 1,832,210      | \$0.10    |
| Aviation Fuel | 404,676        | \$0.10    |

**Electricity and Natural Gas**

**Electricity**

SoCal Edison Electricity

| Rate Code       | Annual kWh           | \$/kWh    | \$                      |
|-----------------|----------------------|-----------|-------------------------|
| AG TOU          | 112,208,191          | \$0.09875 | \$11,080,513.98         |
| Domestic        | 1,256,041,296        | \$0.11795 | \$148,144,544.28        |
| GS-1            | 82,884,759           | \$0.17841 | \$14,787,469.85         |
| GS-2            | 262,676,044          | \$0.08121 | \$21,332,341.81         |
| PA-1            | 16,947,950           | \$0.13312 | \$2,256,145.00          |
| PA-2            | 12,945,067           | \$0.11644 | \$1,507,266.64          |
| Street Lighting | 98,026,610           | \$0.07921 | \$7,764,923.04          |
| TOU-8           | 596,794,701          | \$0.08680 | \$51,800,825.18         |
| TOU-GS          | 154,930,764          | \$0.18348 | \$28,426,510.66         |
| <b>TOTAL</b>    | <b>2,593,455,382</b> |           | <b>\$287,100,540.45</b> |

| SoCal Edison Emission Factors |                          |
|-------------------------------|--------------------------|
| Default (2005)                | Units                    |
| 665.2607                      | lbs CO <sub>2</sub> /MWh |
| 7.5986                        | lbs CH <sub>4</sub> /GWh |
| 11.3094                       | lbs N <sub>2</sub> O/GWh |

| 2005 California Emission Factors |                          |
|----------------------------------|--------------------------|
| Default (2005)                   | Units                    |
| 724.12                           | lbs CO <sub>2</sub> /MWh |
| 30.24                            | lbs CH <sub>4</sub> /GWh |
| 8.08                             | lbs N <sub>2</sub> O/GWh |

Imperial Irrigation District

| Rate Code         | Annual kWh           | \$/kWh   | \$                     |
|-------------------|----------------------|----------|------------------------|
| Residential       | 450,673,960          | \$0.0784 | \$35,332,838.46        |
| Energy Assistance | 41,236,677           | \$0.0549 | \$2,263,068.83         |
| Mobile Home       | 37,606,910           | \$0.0676 | \$2,542,227.12         |
| Agricultural      | 62,987,028           | \$0.0618 | \$3,892,598.33         |
| Small Commercial  | 101,736,856          | \$0.0820 | \$8,342,422.19         |
| Large Commercial  | 321,462,730          | \$0.0659 | \$21,184,393.91        |
| Industrial        | 266,000              | \$0.0628 | \$16,704.80            |
| Street Lights     | 4,298,352            |          | \$0.00                 |
| Area Lighting     | 83,496               |          | \$0.00                 |
| Public Authority  | 12,398,373           | \$0.0732 | \$907,560.90           |
| Interdepartmental | 1,542,560            |          | \$0.00                 |
| <b>TOTAL</b>      | <b>1,034,292,942</b> |          | <b>\$74,481,814.55</b> |

| Imperial Irrigation District Emission Factors |                          |
|---|--------------------------|
| Default (2005)                                | Units                    |
| 612.12  | lbs CO <sub>2</sub> /MWh |
| 31.41   | lbs CH <sub>4</sub> /GWh |
| 6.37  | lbs N <sub>2</sub> O/GWh |

Cogeneration

|             | Annual mWh |
|-------------|------------|
| Badlands    | 5,351.15   |
| EI Sorbante | 15,641.82  |

**Natural Gas**

|                       | therms            | \$/therms              |
|-----------------------|-------------------|------------------------|
| Residential           | 52,372,096        | \$0.80                 |
| Commercial/Industrial | 43,546,543        | \$0.61                 |
| <b>TOTAL</b>          | <b>95,918,639</b> | <b>\$68,461,068.03</b> |

## Area Source Emissions: Landscaping and Woodburning Emissions

### Landscaping Emissions

#### Land use:

|                                  |         |                  |
|----------------------------------|---------|------------------|
| Single Family Residential Units: | 112,132 | units            |
| Multi-family Residential Units:  | 48,854  | units            |
| Commercial Building Space:       | 169,585 | 1000 square feet |
| Industrial Building Space:       | 33,905  | 1000 square feet |

### Woodburning Emissions

|                         |        |                        |
|-------------------------|--------|------------------------|
| Homes with wood stoves: | 35%    | % of residential homes |
| Amount of wood burned:  | 0.80   | cords/unit             |
| Homes with fireplaces:  | 10%    | % of residential homes |
| Price of wood:          | \$3.50 | \$/cord of wood        |

## Water

### Imported Water

|  | Treated (acre-feet) |                      | Untreated (acre-feet) |                      |
|--|---------------------|----------------------|-----------------------|----------------------|
|  | State Water Project | Colorado River Water | State Water Project   | Colorado River Water |
| Coachella Valley Water District          |                     | 14,338.01            |                       |                      |
| Desert Water Agency                      |                     | 18,347.58            |                       |                      |
| Eastern Municipal Water District         | 38,396.92           | 33,412.70            | 313.27                | 272.60               |
| Elisnore Valley Municipal Water District | 7,055.06            | 6,139.26             |                       |                      |
| Rancho California Water District         | 12,311.55           | 10,713.41            | 6,484.35              | 5,642.63             |
| San Gorgonio Water Agency                | 2,175.10            |                      |                       |                      |
| Western Municipal Water District         | 28,650.00           | 9,550.00             |                       |                      |
| <b>Total Imported Water</b>              | <b>88,588.63</b>    | <b>92,500.96</b>     | <b>6,797.62</b>       | <b>5,915.24</b>      |

## Solid Waste

#### Onsite Equipment

|                        |         |
|------------------------|---------|
| Total Diesel Use (gal) | 487,768 |
| Total LNG Use (gal)    | 368,838 |

#### Waste Sources

|                   |     |
|-------------------|-----|
| % Residential     | 35% |
| % Non-Residential | 65% |

#### Fugitive Methane Emissions

|                           | Measured LFG Flow |                          | Destruction Efficiency | Methane Capture in 1990? |
|---------------------------|-------------------|--------------------------|------------------------|--------------------------|
|                           | (SCFM)            | % LFG as CH <sub>4</sub> |                        |                          |
| BADLANDS (flare alone)    | 639               | 43.7%                    | 99.999629%             |                          |
| BADLANDS (flare w/engine) | 189               | 43.7%                    | 99.999629%             |                          |
| BADLANDS (engine)         | 450               | 44.0%                    | 99.700000%             |                          |
| BLYTHE                    | 20                | 8.0%                     | 0.000000%              |                          |
| COACHELLA (1997)          | 346               | 36.8%                    | 99.999644%             |                          |
| CORONA (1986)             | 225               | 37.6%                    | 99.900000%             | Y                        |
| DOUBLE BUTTE (1994)       | 190               | 31.8%                    | 99.999708%             |                          |
| EDOM HILL (1997)          | 700               | 49.7%                    | 99.999785%             |                          |
| ELSINORE (1965)           | 70                | 19.3%                    | 99.900060%             |                          |
| EL SOBRANTE (Total)       | 3014              | 45.0%                    | 99.900000%             | Y                        |
| HIGHGROVE (1998)          | 310               | 46.7%                    | 99.999781%             |                          |
| LAMB CANYON               | 642               | 37.8%                    | 99.999697%             |                          |
| MEAD VALLEY (1997)        | 225               | 28.7%                    | 99.999513%             |                          |
| W. RIVERSIDE (1993)       | 66                | 26.2%                    | 99.999149%             | Y                        |

## Agriculture

#### Annual Crop Growth

|                               | Acres Harvested | Annual Yield (tons) |
|-------------------------------|-----------------|---------------------|
| Hay (including Alfalfa)       | 29648           | 257608              |
| Corn                          | 497             | 24827               |
| Oats                          | 1150            | 3329                |
| Sorghum                       | 3197            | 22942               |
| Wheat                         | 14817           | 55589               |
| Cotton                        | 6901            | 7073                |
| Vegetable Crops & Fruit Trees | 43898           | 289710              |

#### Annual Animal head

|           | #         |
|-----------|-----------|
| Dairy Cow | 43,773    |
| Poultry   | 5,260,914 |
| Sheep     | 12,700    |