

## DWR 2nd Generation GHG Emissions Reduction Goal

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DWR's first generation GHG Emission reduction goal was established in 2010 as:

- 50% reduction from 1990 levels by 2020 and;
- 80% reduction from 1990 levels by 2050.

These Emissions Reduction Goals are described in detail in DWR's Climate Action Plan Phase I: Greenhouse Gas Emissions Reduction Plan (GGERP). The first generation goals were established to guide DWR policy and activities and ensure that DWR was reducing its GHG emissions consistent with Governor Schwarzenegger's Executive Order S-3-05. Consistent with E.O. S-3-05 a baseline year of 1990 was chosen as the benchmark from which emissions reductions would be measured.

In 2014, DWR acted to improve the sophistication and transparency of its GHG emissions reduction targets by adopting a 2nd generation GHG emissions reduction goal and establishing a verified baseline. The verified baseline establishes a more recent level of emissions using data from year 2010 to benchmark DWR's contemporary emissions and from which to measure emissions reductions going forward. Adoption of DWR's 2nd generation GHG emissions reduction goals bring it in line with industry best practice and ensure that emissions reductions to achieve the goals are new reductions resulting from concrete actions.

This 2nd generation GHG emission reduction goal is consistent with the original 1st generation goal s and has the same absolute emissions targets for 2020 (1,373,000 mtCO<sub>2</sub>e) and 2050 (549,000 mtCO<sub>2</sub>e). This new goal gets resets the benchmark from which contemporary GHG emissions reductions will be measured. This new verified baseline at 2010 emissions levels more accurately benchmarks DWR's current and future actions.

In establishing a baseline year in which to benchmark DWR's 2nd generation goals DWR reviewed emissions data from all available verified emissions reports (2007-2013), operations data for each year, and regulations and state policies. Based on this analysis DWR selected 2010 as the most appropriate year to use as its benchmark. Major reasons for selection of 2010 are listed below:

- DWR's emissions vary considerably based on hydrologic conditions which determine the amount of water delivered and hydropower generated—2010 was a very average year in terms of operations with pumping levels and hydropower generation both falling within 3% of long-term average levels.
- 2010 is also highly representative of DWR's pre-GGERP business-as-usual operations for energy purchases and energy resources used.
- 2010's emissions levels (2,048,000 mtCO<sub>2</sub>e) are essentially equal to the 3 year average (2010-2012) i.e., 2010 was not picked to provide an inflated baseline level—2012 emissions levels were nearly 5% higher than 2010 levels.
- Executive Order B-18-12 (issued in 2012) specifically calls out 2010 as the baseline year from which emissions reductions for all state agencies should be measured. This Executive Order calls for 10% reductions by 2015 and 20% reductions by 2020 (still much less aggressive than DWR's own goals).

DWR's numeric GHG Emissions Targets for 2020 and 2050 (1,373,000 mtCO<sub>2</sub>e and 549,000 mtCO<sub>2</sub>e respectively) remain unchanged from those detailed in the GGERP (2012). Thus, DWR's 2nd Generation GHG Emissions Reduction Goals are expressed as:

- 33% reduction from 2010 levels by 2020 and;
- 73% reduction from 2010 levels by 2050.

