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Clean Water derived from condensing products of combustion

The combustion products of natural gas consists of up to 19% water. Various industrial or commercial processes which have heat sinks less than 120F can be used to condense water out of boiler or fluid heater flue gases, which neutralized of carbonic acid can be used as potable water while increasing the overall energy efficiency of the process. In situations lacking a suitable heat sink, ambient air or ocean water can be used to condense flue gases from gas turbines, engines or any other combustion source.

Combustion of 2 billion btu of natural gas is needed to provide for California's yearly kilowatt hour consumption of 250000 million kw-hr/year assuming a grid heat rate of 8000btu/kw-hr. That works out to 232558 million btu/hour over 8600 hours. Assuming all of the power is generated via gas turbine with an exhaust of 15% excess oxygen dry, 34000 gallons per minute can be condensed by cooling gas turbine exhaust to 70F, equating to 54,000 acre feet a year.