

## Examples of fuel switching at power plants resulting in GHG reductions

	Vertically Integrated States	Restructured States
IOUs	<ul style="list-style-type: none"> <li>In 2010, <b>Xcel Energy's</b> emissions reduction plan was approved by the Colorado Public Utilities Commission. This plan includes the retirement of 593 megawatts of coal-fired generation from 2012 to 2017, to be replaced by a 569 MW combined cycle gas-fired plant in 2015. The plan also calls for fuel switching from coal to gas for one 109 MW unit at the Arapahoe plant, and another 352 MW unit at the Cherokee plant.<sup>1</sup></li> <li>In 2012, <b>Progress Energy Carolinas</b> brought online a 920 MW combined cycle gas-fired plant at its H.F. Lee location in Goldsboro, NC.<sup>2</sup> This plant was brought online to replace 382 MW in coal generating capacity. However, the operation of this plant has also factored into the decision-making behind the closures of other coal facilities, such as Progress Energy Carolinas' Cape Fear plant and Robinson Unit 1.<sup>3</sup></li> </ul>	<ul style="list-style-type: none"> <li><b>Public Service of New Hampshire's</b> Schiller Station includes three 50-megawatt boilers, two of which can burn coal or oil, and one that was converted in 2006 from coal to burn clean wood chips. The biomass unit generates enough energy to power 50,000 homes, reduces GHG emissions from coal by 130,000 tons annually, provides a wood chip market for New Hampshire's forest industry, and creates renewable energy certificates to sell into the REC market.<sup>5</sup></li> </ul>
Munis/Co-ops	<ul style="list-style-type: none"> <li>In October 2013, <b>Dairyland Power Cooperative</b> in Wisconsin announced the retirement one of its two remaining coal-fired units at its Alma plant. This follows the retirement of three other units at the plant in 2011. These retirements are a step for Dairyland towards diversifying its resource mix and meeting its target to produce a 25 percent of its electricity from renewable sources by 2025, up from 12 percent today.<sup>4</sup> Dairyland was recently honored at the 2014 White House Solar Summit for its efforts in expanding the use of solar generation. Currently there are 350 consumer-owned solar projects in the Dairyland system.<sup>5</sup></li> </ul>	<ul style="list-style-type: none"> <li><b>Vineyard Municipal Electric Utility</b> has retired coal units totaling 71 MW at the Howard Down generating station in New Jersey over the last decade. To make up for the loss in generation, Vineyard began operating a 64MW natural gas-fired combustion turbine on the site in 2012.<sup>7,8</sup></li> </ul>
IPPs		<ul style="list-style-type: none"> <li>Following <b>Calpine Energy's</b> 2010 purchase of the Deepwater Energy Center in Pennsylvania, New Jersey, Calpine converted the 83 MW coal plant with natural gas and expanded the capacity of the plant to 158 MW.<sup>9,10</sup></li> <li>In 2013, <b>NRG</b> successfully completed the repowering of a 16 MW coal unit with natural gas at its Energy Center Dover facility in Delaware. The facility is part of a broader combined heat and power facility with two other 50 MW gas turbines.<sup>11</sup> In addition, <b>NRG's</b> Devon Repowering Project at the Devon plant in Milford, Connecticut replaced the existing oil-fired units with 200 MW of gas peaking units, reducing greenhouse gas emissions by 27 percent in the process.<sup>12</sup></li> </ul>

### Sources

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