UNC Chapel Hill

Utilities at a Glance

UNC Chapel Hill Utilities

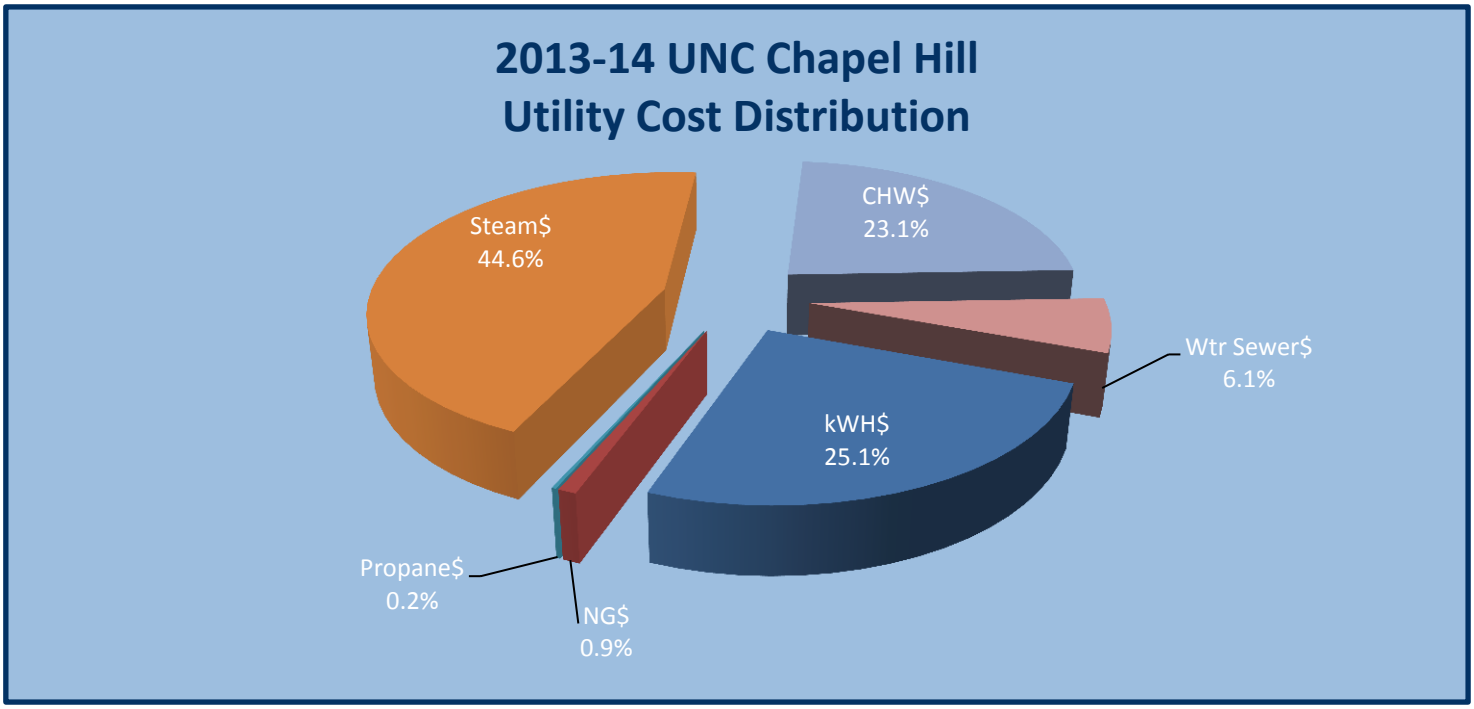
Metric	Basline 2002-2003	Current 2013-2014	% change
Gross square feet	13,477,719	18,613,943	38%
Btu per square foot per year	193,500	133,521	-31%
Cost per million Btu	$ 18.22	$ 35.35	94%
Total Avoided Cost		$236,057,774.28	
Electric consumption in kWh	233,785,097	291,025,539	24%
Electric Cost	$ 13,249,697	$ 23,516,562	77%
Natural Gas consumption in Therms	795,084	950,740	20%
Natural Gas Cost	$ 725,083	$ 796,373	10%
#2 Fuel oil gallons	0	0	%
#2 Fuel oil cost	$ -	$ -	%
#6 Fuel oil gallons	0	0	%
#6 Fuel oil cost	$ -	$ -	%
Propane gallons	61,786	119,526	93%
Propane cost	$ 63,298	$ 191,063	202%
Steam thousands of pounds	1,023,450	907,162	-11%
Steam cost	$ 24,096,183	$ 41,780,831	73%
Chilled Water tons	97,308,346	95,043,599	-2%
Chilled Water cost	$ 9,390,249	$ 21,570,618	130%
Water thousands of gallons	666,812	480,771	-28%
Water & Sewer cost	$ 2,631,427	$ 5,726,001	118%

UNC Chapel Hill

Year End Utility Comparison

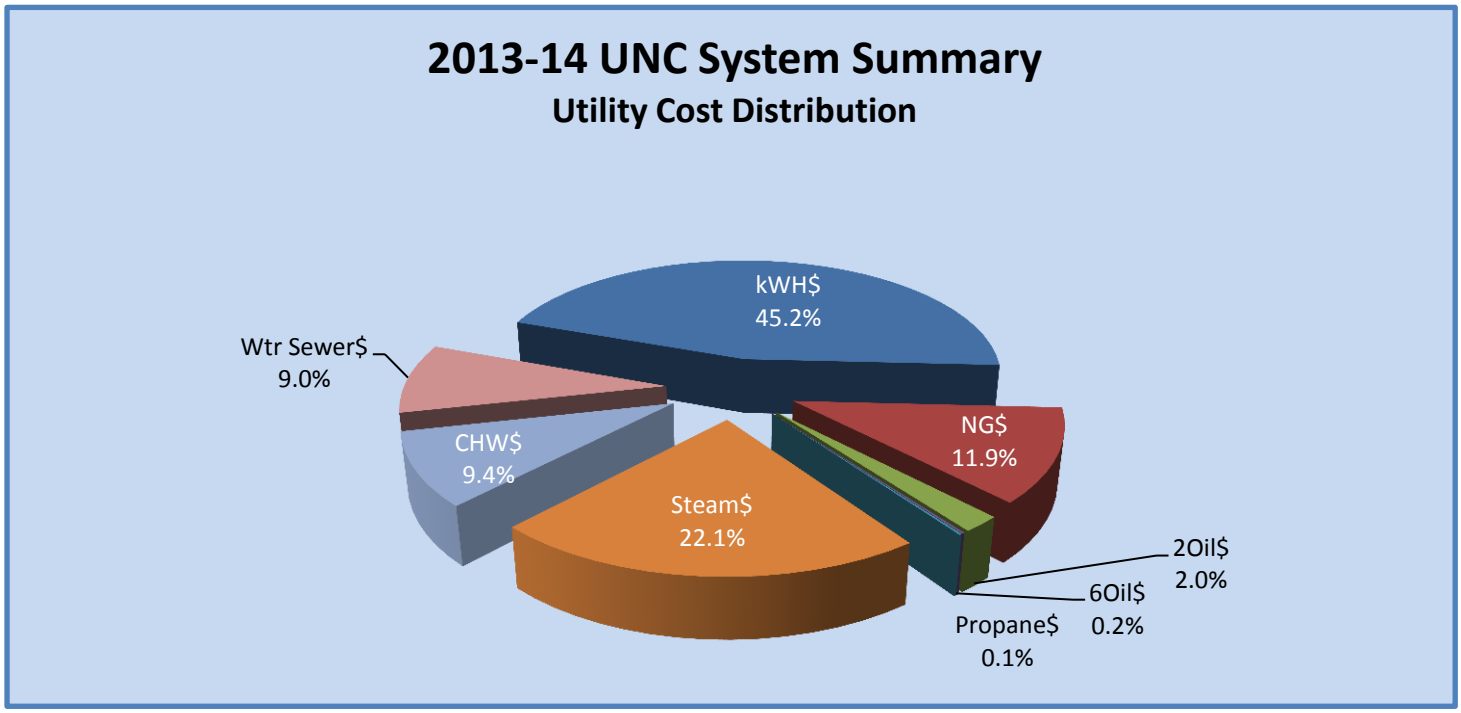
UNC CH Utilities Summary 2013-2014

kWH$	NG$	2Oil$	6Oil$	Propane$	Steam$	CHW$	Wtr Sewer$	Total Utility $
$ 23,516,562	$ 796,373			$ 191,063	$ 41,780,831	$ 21,570,618	$ 5,726,001	$ 93,581,449



UNC System Utilities Summary 2013-2014

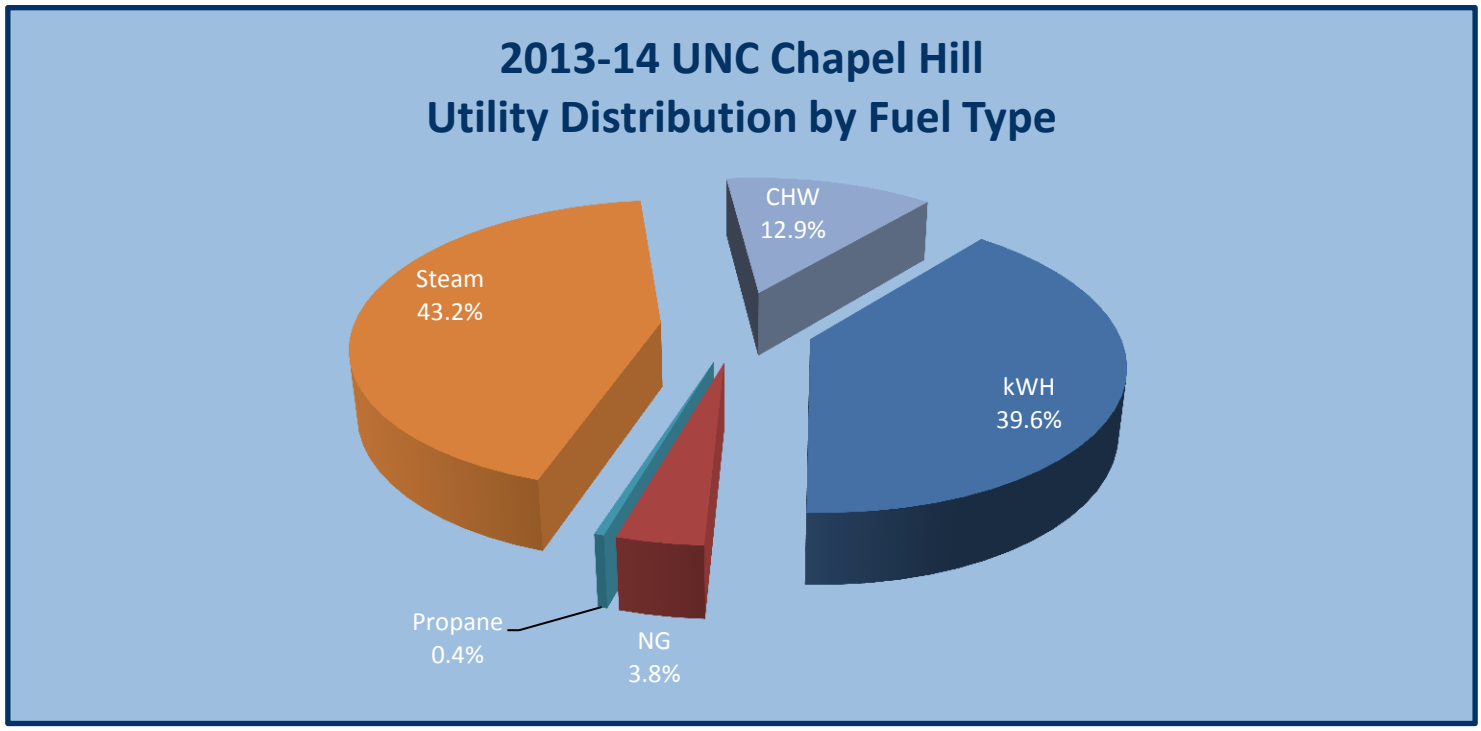
kWH$	NG$	2Oil$	6Oil$	Propane$	Steam$	CHW$	Wtr Sewer$	Total Utility $
$ 105,486,830	$ 27,833,187	$ 4,769,110	$ 357,520	$ 323,851	$ 51,596,243	$ 21,825,151	$ 20,936,533	$ 233,128,425



Year End Btu by Fuel Type for 2013-2014

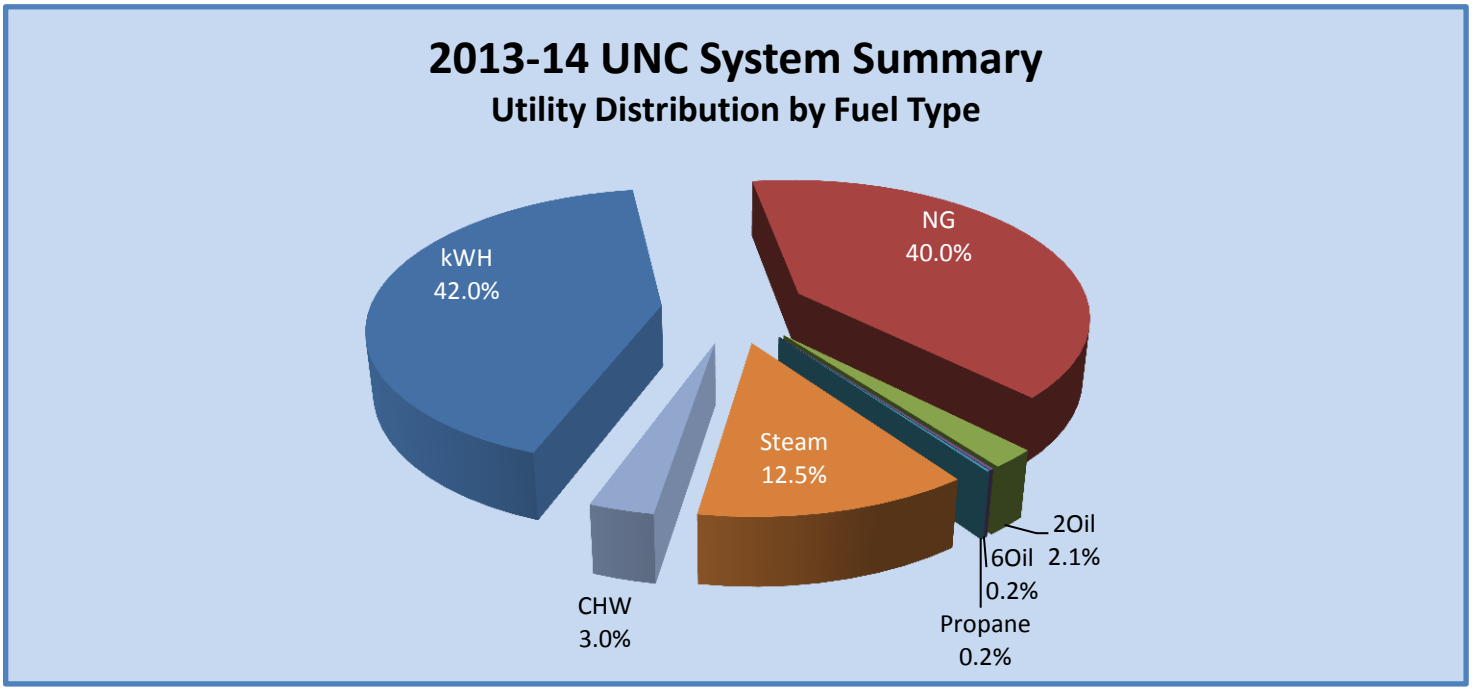
UNC CH Btu by Fuel Type 2013-2014

kWH	NG	2Oil	6Oil	Propane	Steam	CHW	Total Btu
992,979,139,068	95,074,000,000			10,954,318,848	1,083,151,428,000	324,288,759,788	2,506,447,645,704



UNC System Btu by Fuel Type 2013-2014

kWH	NG	2Oil	6Oil	Propane	Steam	CHW	Total Btu
4,619,045,582,900	4,400,796,880,000	235,231,889,133	21,306,047,627	16,921,575,117	1,373,131,044,000	328,565,033,036	10,994,998,051,813

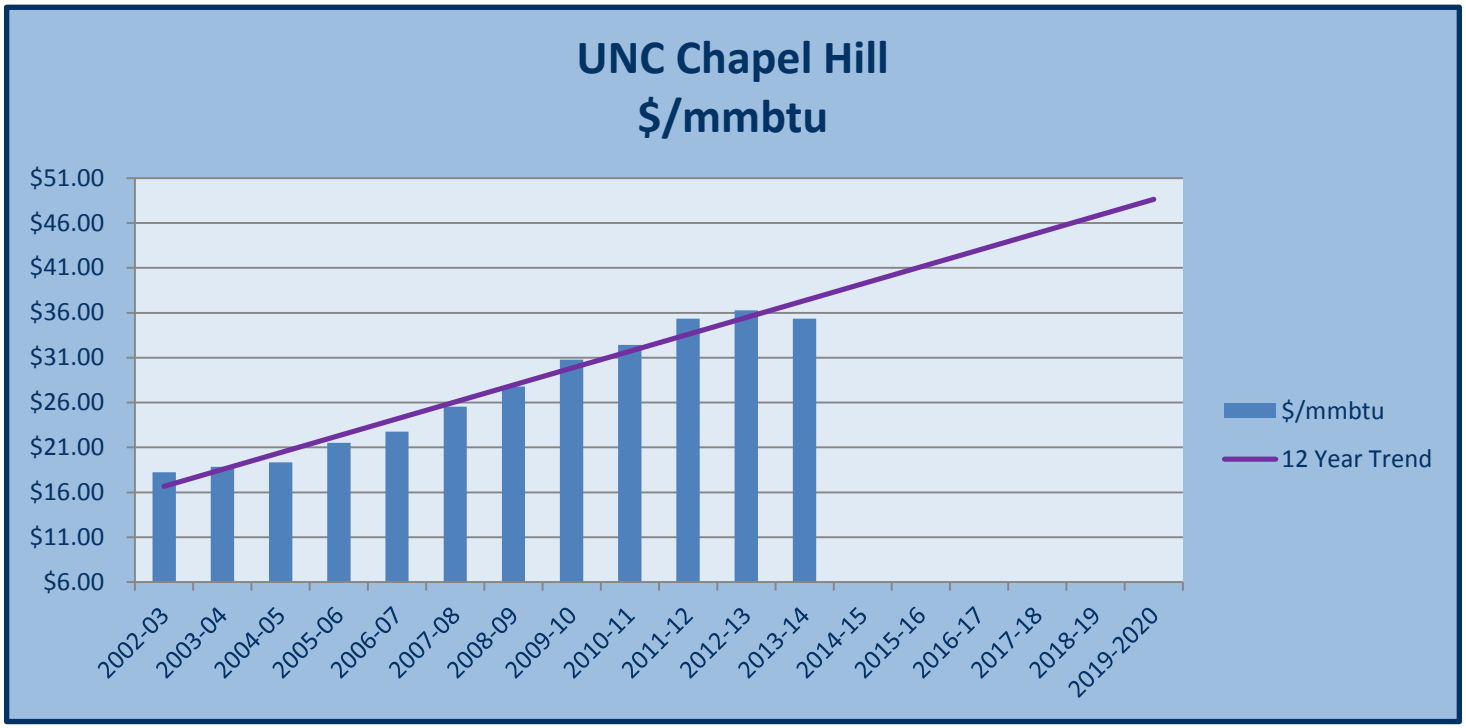


UNC Chapel Hill

12 Year Energy $/mmbtu Evaluation 2003-2014 & Trend Through 2020

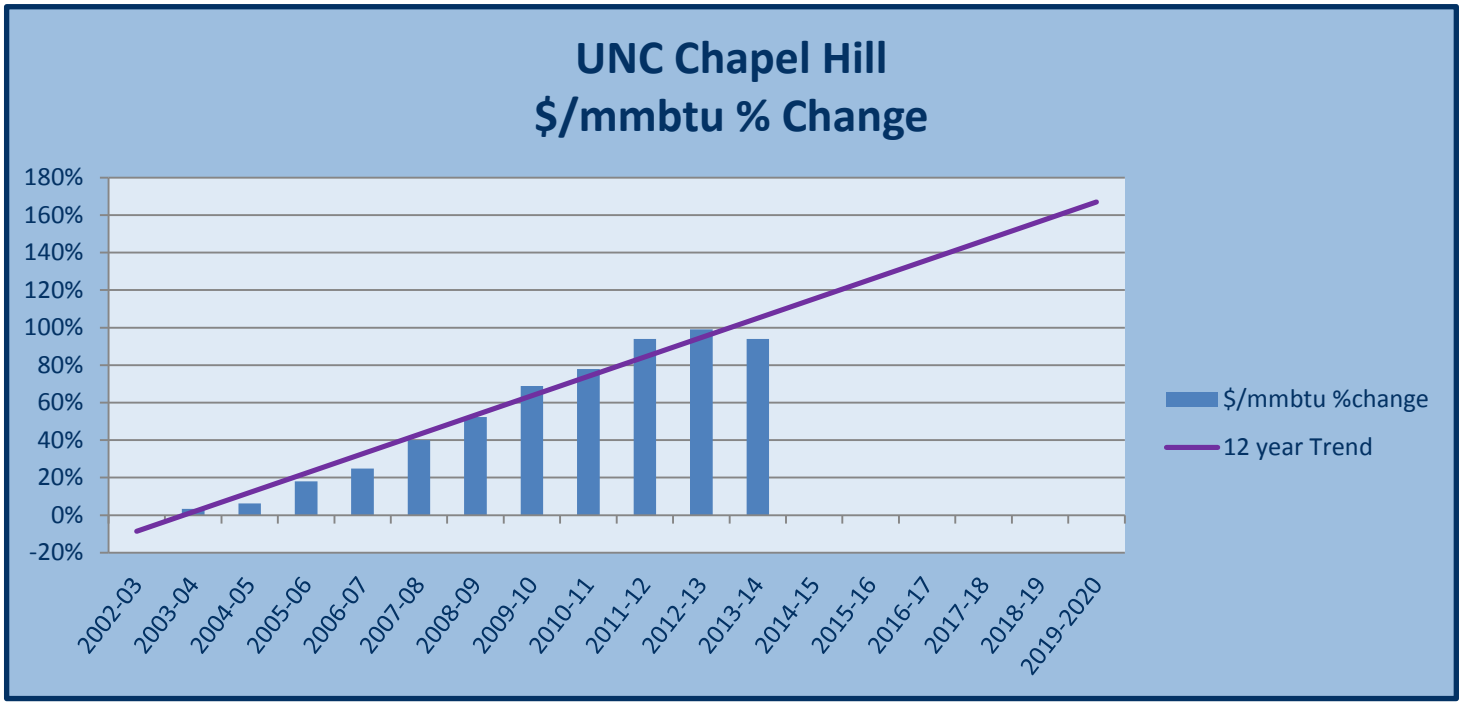
UNC CH Energy $/mmbtu

2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11
$ 18.22	$ 18.83	$ 19.35	$ 21.51	$ 22.76	$ 25.52	$ 27.77	$ 30.79	$ 32.43
2011-12	**2012-13**	**2013-14**	**2014-15**	**2015-16**	**2016-17**	**2017-18**	**2018-19**	**2019-2020**
$ 35.34	$ 36.27	$ 35.35						



UNC CH Energy $/mmbtu % Change

2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11
0%	3%	6%	18%	25%	40%	52%	69%	78%
2011-12	**2012-13**	**2013-14**	**2014-15**	**2015-16**	**2016-17**	**2017-18**	**2018-19**	**2019-2020**
94%	99%	94%						

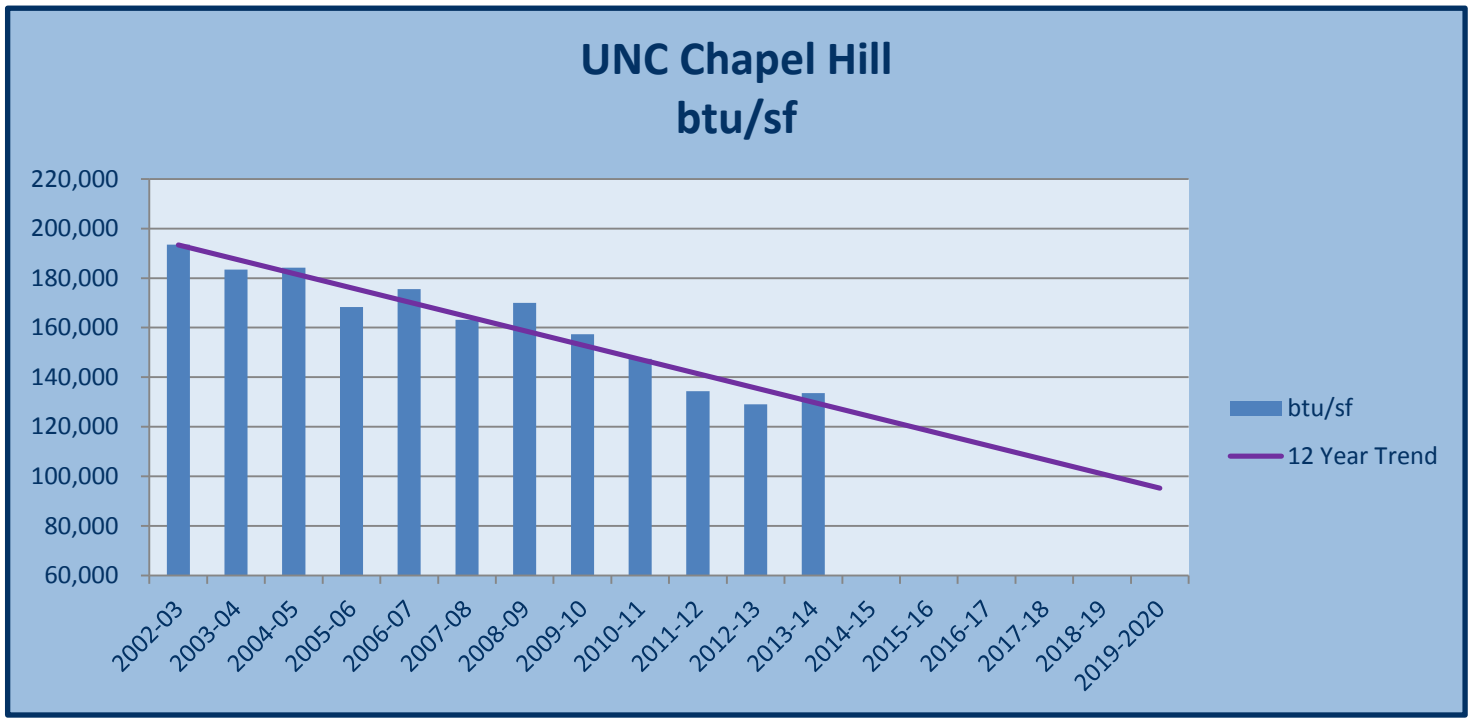


UNC Chapel Hill

12 Year Energy btu/sf Evaluation 2003-2014 & Trend Through 2020

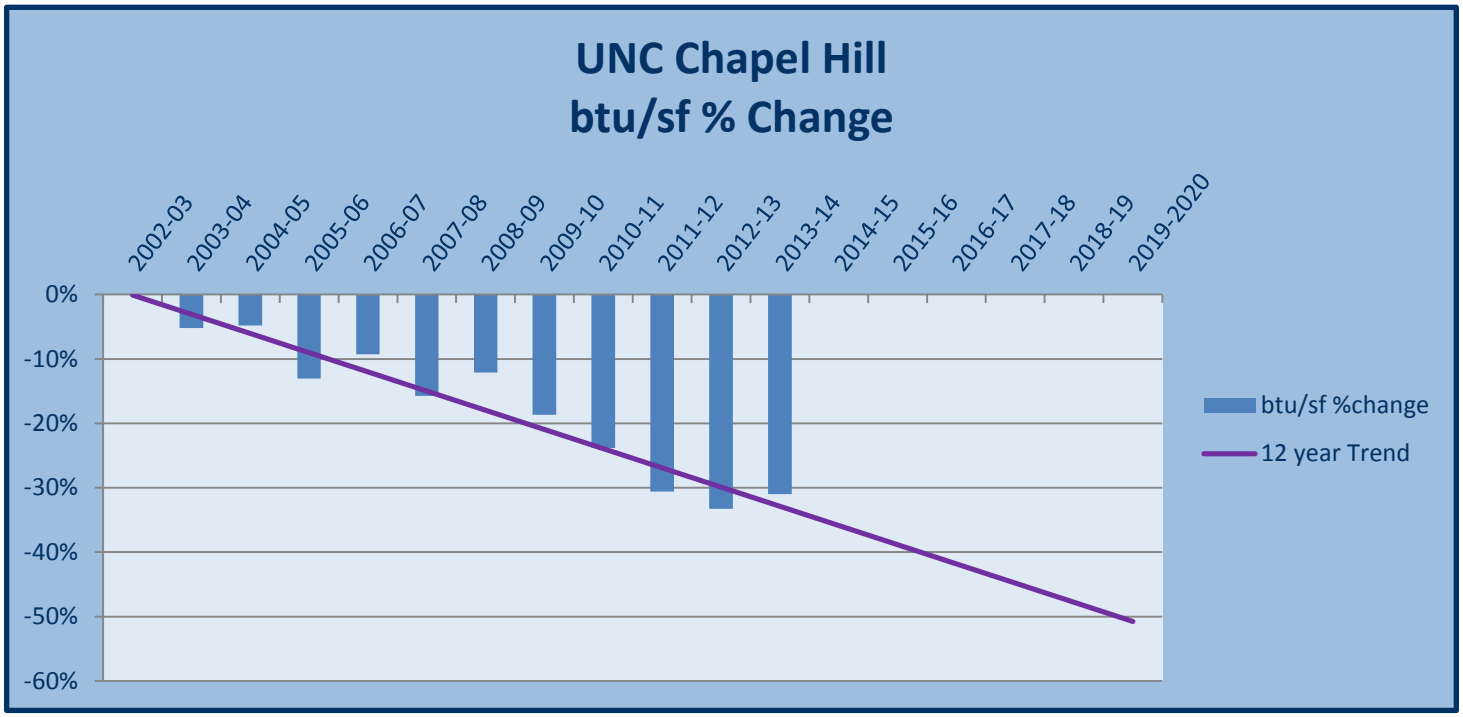
UNC CH Energy btu/sf

2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11
193,500	183,399	184,212	168,252	175,542	163,093	170,032	157,347	147,334
2011-12	**2012-13**	**2013-14**	**2014-15**	**2015-16**	**2016-17**	**2017-18**	**2018-19**	**2019-2020**
134,288	129,083	133,521						



UNC CH Energy btu/sf % Change

2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11
0%	-5%	-5%	-13%	-9%	-16%	-12%	-19%	-24%
2011-12	**2012-13**	**2013-14**	**2014-15**	**2015-16**	**2016-17**	**2017-18**	**2018-19**	**2019-2020**
-31%	-33%	-31%						

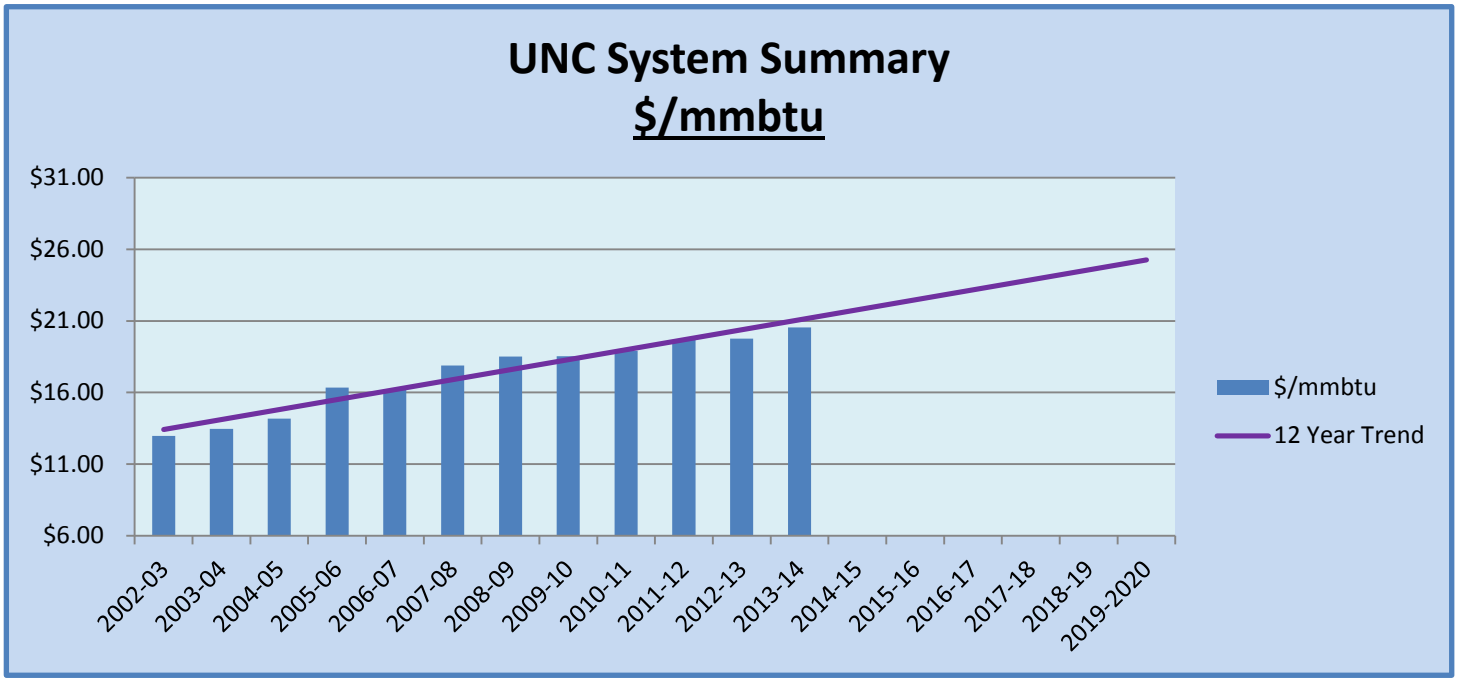


UNC System Summary

12 Year Energy $/mmbtu Evaluation 2003-2014 & Trend Through 2020

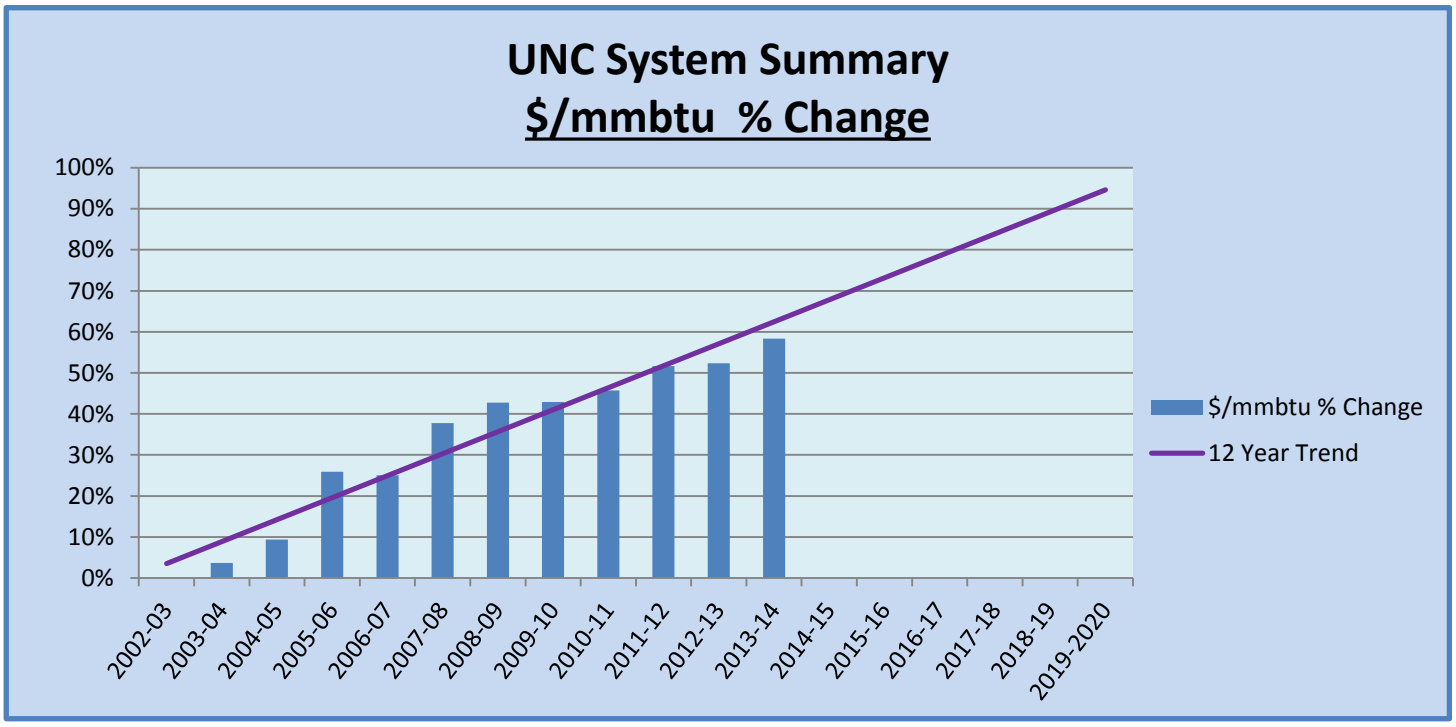
UNC System Energy $/mmbtu

2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11
$ 12.98	$ 13.45	$ 14.19	$ 16.34	$ 16.23	$ 17.88	$ 18.52	$ 18.54	$ 18.90
2011-12	**2012-13**	**2013-14**	**2014-15**	**2015-16**	**2016-17**	**2017-18**	**2018-19**	**2019-2020**
$ 19.68	$ 19.77	$ 20.54						



UNC System Energy $/mmbtu % Change

2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11
0%	4%	9%	26%	25%	38%	43%	43%	46%
2011-12	**2012-13**	**2013-14**	**2014-15**	**2015-16**	**2016-17**	**2017-18**	**2018-19**	**2019-2020**
52%	52%	58%						

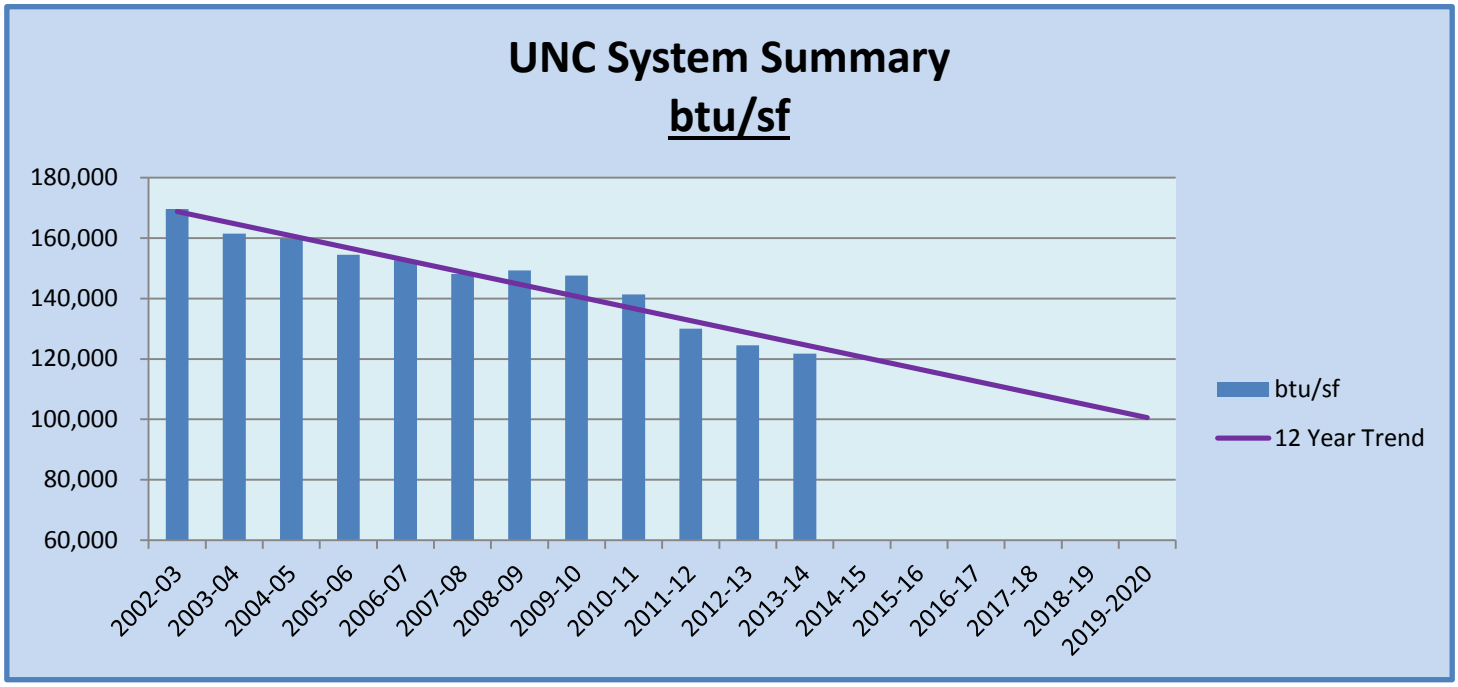


UNC System Summary

12 Year Energy Btu/sf Evaluation 2003-2014 & Trend Through 2020

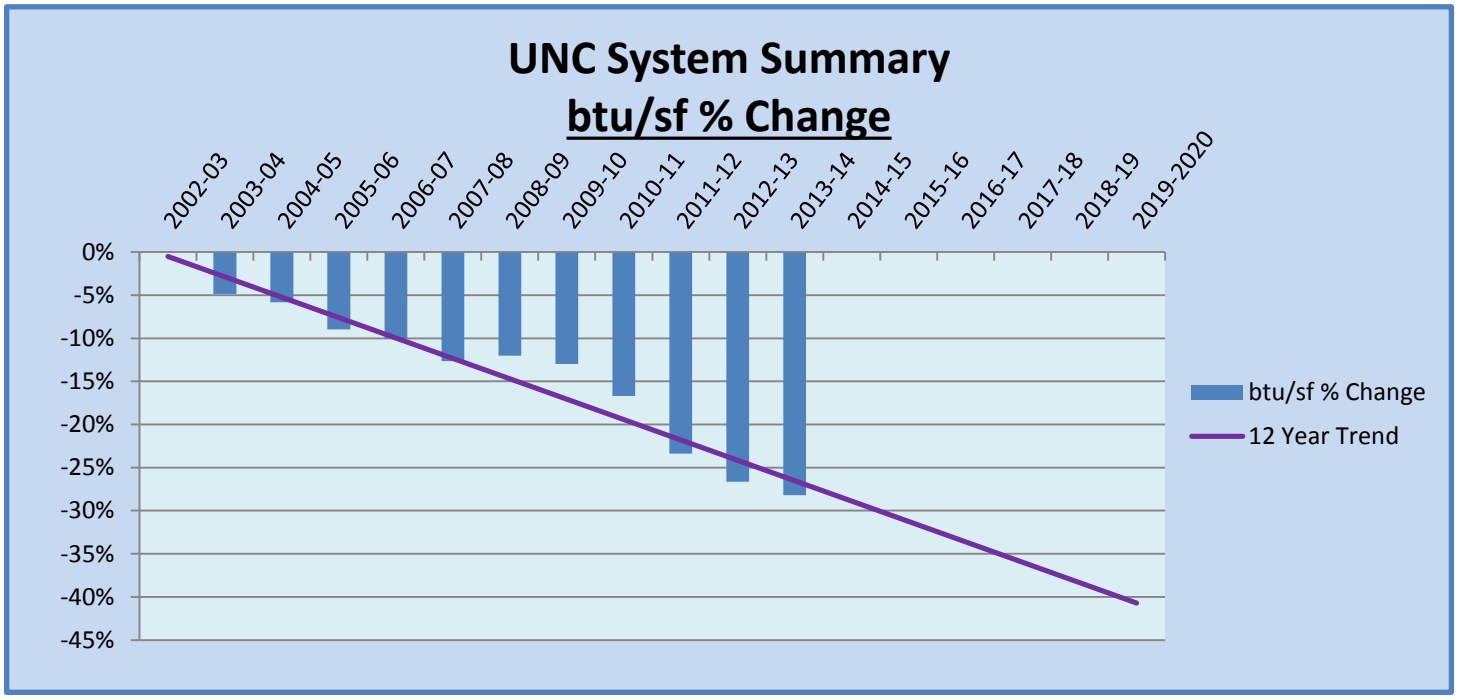
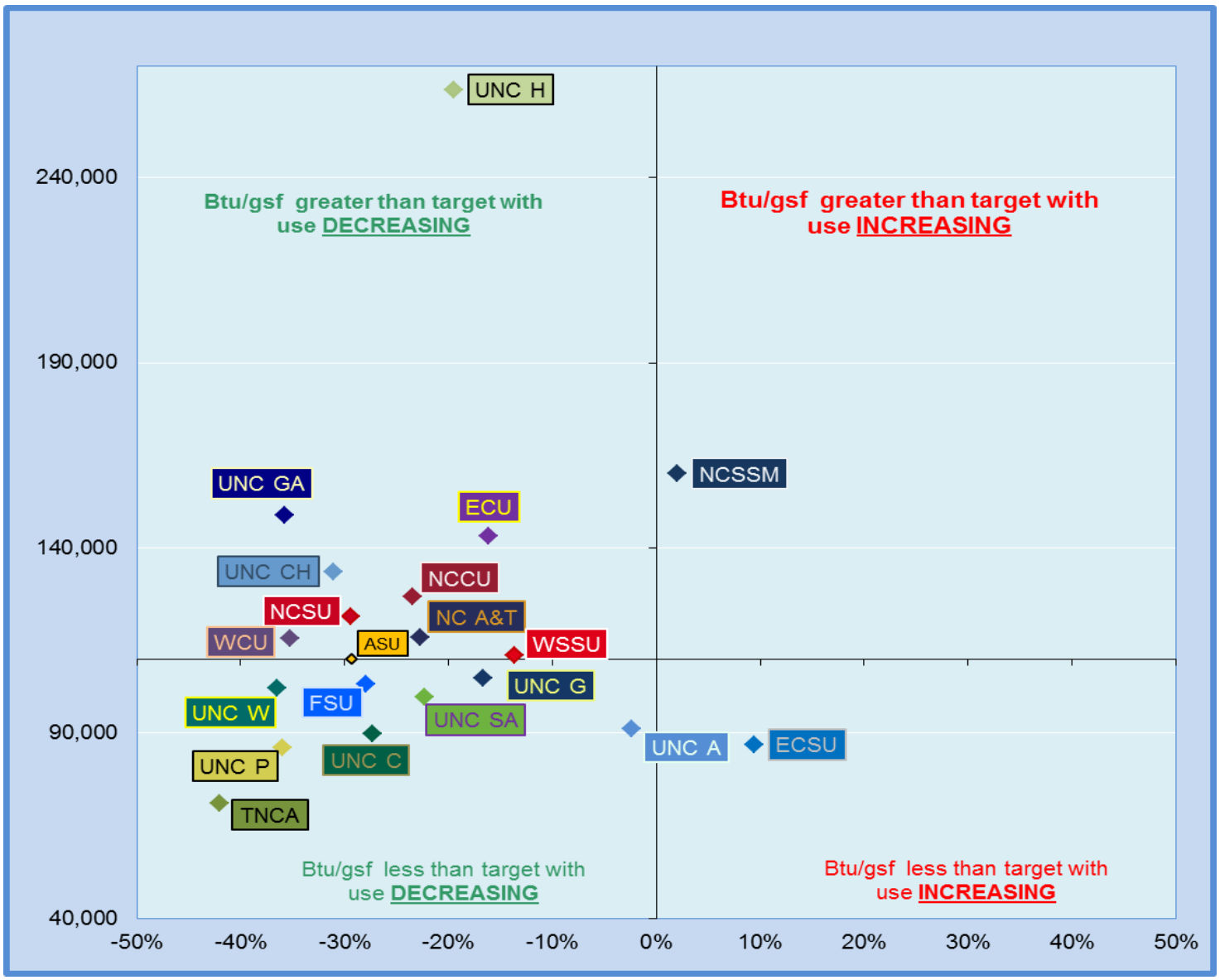
UNC System Energy Btu/sf

2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11
169,641	161,422	159,774	154,418	152,682	148,154	149,276	147,583	141,295
2011-12	**2012-13**	**2013-14**	**2014-15**	**2015-16**	**2016-17**	**2017-18**	**2018-19**	**2019-2020**
129,971	124,448	121,775						



UNC System Energy Btu/sf % Change

2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11
0%	-5%	-6%	-9%	-10%	-13%	-12%	-13%	-17%
2011-12	**2012-13**	**2013-14**	**2014-15**	**2015-16**	**2016-17**	**2017-18**	**2018-19**	**2019-2020**
-23%	-27%	-28%						



Btu/gsf and % Reduction