

## CBC Getting Greener Comparison of Energy Resources

**Table 3: Additional Renewable Energy Sources Needed by 2030 and 2040**

| <b>Renewable Energy Goal Calculations</b>                               | <b>2030 Goal<br/>70% (GWh)</b> | <b>2040 Goal<br/>100% (GWh)</b> |
|---|--------------------------------|---------------------------------|
| Projected 2030 total energy required                                    | 141,000                        | 141,000                         |
| Target energy to be provided by renewable resources                     | 98,700                         |                                 |
| Target energy to be provided by zero emissions resources                |                                | 141,000                         |
| Existing renewables at the end of 2017                                  | 43,100                         | 43,100                          |
| Renewables required in 2040 if nuclear is not included                  |                                | 97,900                          |
| Licensed nuclear power resources that may still be in operation in 2040 |                                | 10,100                          |
| Minimum incremental renewable resources needed                          | 55,600                         | 87,800                          |

## APPENDIX C: MEETING FUTURE RENEWABLE ENERGY REQUIREMENTS

### Forecast of Power (GWh) Resources to Meet CLCPA Goals

| <b>Energy Resource</b>     | <b>2017</b>    | <b>2025</b>    | <b>2030</b>    | <b>2035</b>    | <b>2040</b>    |
|----------------------------|----------------|----------------|----------------|----------------|----------------|
| Existing Renewables        | 43,083         | 43,083         | 43,083         | 43,083         | 43,083         |
| NYSERDA Renewable Pipeline |                | 10,884         | 10,884         | 10,884         | 10,884         |
| Existing Nuclear           | 49,062         | 33,687         | 16,987         | 16,987         | 16,987         |
| Natural Gas                | 52,728         | 57,388         | 44,413         | 22,206         |                |
| CLCPA Solar                |                | 8,400          | 8,400          | 8,400          | 8,400          |
| CLCPA Wind                 |                | 6,300          | 22,050         | 37,800         | 37,800         |
| Coal, Oil & Solid Waste    | 8,289          |                |                |                |                |
| Additional Renewables      |                |                | 35,283         | 56,740         | 93,946         |
| <b>TOTAL GENERATION</b>    | <b>153,163</b> | <b>159,742</b> | <b>181,100</b> | <b>196,100</b> | <b>211,100</b> |

| <b>Comparison of Tables</b>  | <b>2030</b> | <b>2040</b> |
|--|-------------|-------------|
| Table 3 - Projected total energy required                                | 141,000     | 141,000     |
| Table 3 - Target energy to be provided by renewable resources            | 98,700      | 141,000     |
| Table 3 - Existing renewables at the end of 2017                         | 43,100      | 43,100      |
| Table 3 - nuclear power resources that may still be in operation in 2040 |             | 10,100      |
| Table 3 - Minimum incremental renewable resources needed                 | 55,600      | 87,800      |
| Table 3 Total Renewables   | 98,700      | 141,000     |
| Appendix C - Existing Renewables   | 43,083      | 43,083      |
| Appendix C - NYSERDA Renewable Pipeline                                  | 10,884      | 10,884      |
| Appendix 3 - Existing Nuclear  |             | 16,987      |
| Appendix C - CLCPA Solar   | 8,400       | 8,400       |
| Appendix C - CLCPA Wind  | 22,050      | 37,800      |
| Appendix C - Additional Renewables                                       | 35,283      | 93,946      |
| Appendix C Total Renewables  | 119,700     | 211,100     |