

**APPENDIX B:  
ACRONYMS AND ABBREVIATIONS**

**RENEWABLE FUELS ROADMAP AND  
SUSTAINABLE BIOMASS FEEDSTOCK SUPPLY FOR NEW YORK**  
Final Report

Submitted to  
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## **Acronyms/Abbreviations**

### **Acronym**

### **Explanation**

|                                    |                                                                         |
|------------------------------------|-------------------------------------------------------------------------|
| ABE                                | Acetone, butanol and ethanol                                            |
| ACES                               | American Clean Energy and Security Act                                  |
| ACI                                | Average carbon intensity                                                |
| AEC                                | Areas of environmental concern                                          |
| AFV                                | Alternative fuel vehicle                                                |
| AIP                                | Annual incentive payment                                                |
| ARRA                               | American Recovery and Reinvestment Act                                  |
| ASTM                               | American Society for Testing and Materials                              |
| BCAP                               | Biomass Crop Assistance Program                                         |
| BEA                                | Bureau of Economic Analysis                                             |
| BMP                                | Best management practice                                                |
| BRDI                               | Biomass Research and Development Initiative                             |
| Btu                                | British thermal unit                                                    |
| bu                                 | Bushel                                                                  |
| CAA                                | Clean Air Act                                                           |
| CAFE                               | Corporate average fuel economy                                          |
| CH <sub>3</sub> CH <sub>2</sub> OH | Ethanol                                                                 |
| CH <sub>4</sub>                    | Methane                                                                 |
| CHP                                | Combined heat and power; aka co-generation                              |
| CI                                 | Carbon intensity                                                        |
| CNG                                | Compressed natural gas                                                  |
| CO <sub>2</sub>                    | Carbon dioxide                                                          |
| CO <sub>2</sub> eq                 | Carbon dioxide equivalent                                               |
| CO                                 | Carbon monoxide                                                         |
| CRP                                | Conservation Reserve Program                                            |
| CSBP                               | Council on Sustainable Biomass Production                               |
| CURE                               | Cancer Unit Risk Estimate                                               |
| cwt                                | Hundredweight; 100lbs                                                   |
| DDGS                               | Dried distiller's grains with solubles                                  |
| DOE                                | Department of Energy                                                    |
| Dt                                 | Dry ton                                                                 |
| EERE                               | Office of Energy Efficiency and Renewable Energy, Department of Energy  |
| EISA                               | Energy Independence and Security Act of 2007                            |
| EG                                 | Establishment grant                                                     |
| EIA                                | Energy Information Administration, Department of Energy                 |
| EPAct                              | Energy Policy Act of 1992                                               |
| ETBE                               | Ethyl tertiary butyl ether                                              |
| FAME                               | Fatty acid methyl ester                                                 |
| FFV                                | Flexible fuel vehicle                                                   |
| FSC                                | Forest Stewardship Council                                              |
| FIA                                | Forest Inventory and Analysis database                                  |
| FT                                 | Fischer Tropsch                                                         |
| GDP                                | Gross domestic product                                                  |
| gee                                | Gallon ethanol equivalent                                               |
| gge                                | Gallon gasoline equivalent                                              |
| GHG                                | Greenhouse gas                                                          |
| GIS                                | Geographic information system                                           |
| REET                               | Greenhouse Gases, Regulated Emissions, and Energy Use in Transportation |
| GWP                                | Global warming potential                                                |
| ha                                 | Hectare                                                                 |
| HC                                 | Hydrocarbon                                                             |

|                  |                                                          |
|------------------|----------------------------------------------------------|
| HDO              | Hydrodeoxygenation                                       |
| HDV              | Heavy duty vehicle                                       |
| HEV              | Hybrid electric vehicle                                  |
| HHV              | Higher heating value                                     |
| HUC              | Hydrologic unit code                                     |
| iLUC             | Indirect land use change                                 |
| IPCC             | Intergovernmental Panel on Climate Change                |
| IRR              | Internal rate of return                                  |
| J                | Joule                                                    |
| kg               | Kilogram                                                 |
| kW               | Kilowatt                                                 |
| kWh              | Kilowatt hour                                            |
| LCA              | Life cycle analysis                                      |
| LCE              | Lignocellulosic ethanol                                  |
| LCFS             | Low carbon fuel standard                                 |
| LDV              | Light duty vehicle                                       |
| LHV              | Lower heating value                                      |
| LNG              | Liquefied natural gas                                    |
| LTCHG            | Low-temperature, catalytic, hydrothermal gasification    |
| Mdt              | Million dry tons                                         |
| Mgt              | Million green tons                                       |
| mg               | Milligram                                                |
| MGY              | Million gallons per year                                 |
| MMBtus           | Million British thermal units                            |
| MOU              | Memorandum of understanding                              |
| MSW              | Municipal solid waste                                    |
| mt               | metric ton                                               |
| Mmt              | million metric tons                                      |
| MTBE             | Methyl tertiary butyl ether                              |
| MW               | Megawatt                                                 |
| N <sub>2</sub> O | Nitrous oxide                                            |
| NASS             | National Agricultural Statistical Service                |
| NBSM             | National Biorefinery Siting Model                        |
| NCCPI            | National Commodity Crop Productivity Index               |
| NEPA             | National Environmental Policy Act                        |
| NHTSA            | National Highway Traffic Safety Administration           |
| NLCD             | National Land Cover Database                             |
| NO <sub>x</sub>  | Nitrogen oxides                                          |
| NMHC             | Non-methane hydrocarbons                                 |
| NREL             | National Renewable Energy Laboratory                     |
| NWI              | National Wetlands Inventory                              |
| NYSDEC           | New York State Department of Environmental Conservation  |
| NYSDOS           | New York State Department of State                       |
| NYSDOT           | New York State Department of Transportation              |
| NYSERDA          | New York State Energy Research and Development Authority |
| O&M              | Operation and maintenance                                |
| ODT              | Oven-dry ton                                             |
| ppm              | Parts per million                                        |
| ppb              | Parts per billion                                        |
| PEFC             | Panel for the Endorsement of Forest Certification        |
| PM               | Particulate matter                                       |
| PWT              | Program Work Team                                        |
| R&D              | Research & development                                   |
| RD&D             | Research, development and deployment                     |
| RETF             | Renewable Energy Task Force                              |
| RFS              | Renewable Fuel Standard                                  |

|                 |                                               |
|-----------------|-----------------------------------------------|
| RGGI            | Regional Greenhouse Gas Initiative            |
| RPS             | Renewable Portfolio Standard                  |
| RSB             | Roundtable on Sustainable Biofuels            |
| RSPO            | Roundtable on Sustainable Palm Oil Production |
| SBA             | Sustainable Biodiesel Alliance                |
| SCWG            | Supercritical water gasification              |
| SFI             | Sustainable Forestry Initiative               |
| SMR             | Steam methane reforming                       |
| SO <sub>2</sub> | Sulfur dioxide                                |
| SO <sub>x</sub> | Sulfur oxides                                 |
| T&D             | Transportation and distribution               |
| TCI             | Total capital investment                      |
| Ton             | U.S. short ton                                |
| Tonne           | Metric ton                                    |
| ULSD            | Ultra low sulfur diesel                       |
| USDA            | United States Department of Agriculture       |
| USDOE           | United States Department of Energy            |
| USDOT           | United States Department of Transportation    |
| USEPA           | United States Environmental Protection Agency |
| USFS            | United States Forest Service                  |
| USGS            | United States Geological Survey               |
| VOCs            | Volatile organic compounds                    |
| WDGS            | Wet distiller's grains with soluble           |
| WHIP            | Wildlife Habitat Incentives Program           |
| WRP             | Wetlands Reserve Program                      |
| WTP             | Well-to-pump                                  |
| W2W             | Well-to-wheels                                |