

Legislation passed in December 2007 created a large incentive to increase the total amount of renewable biofuels available in the U.S. with nearly half to be derived from lignocellulosic biomass, but excluded the use of biomass from some sources.

## Section: INTRODUCTION

### Energy Independence and Security Act (EISA) 2007

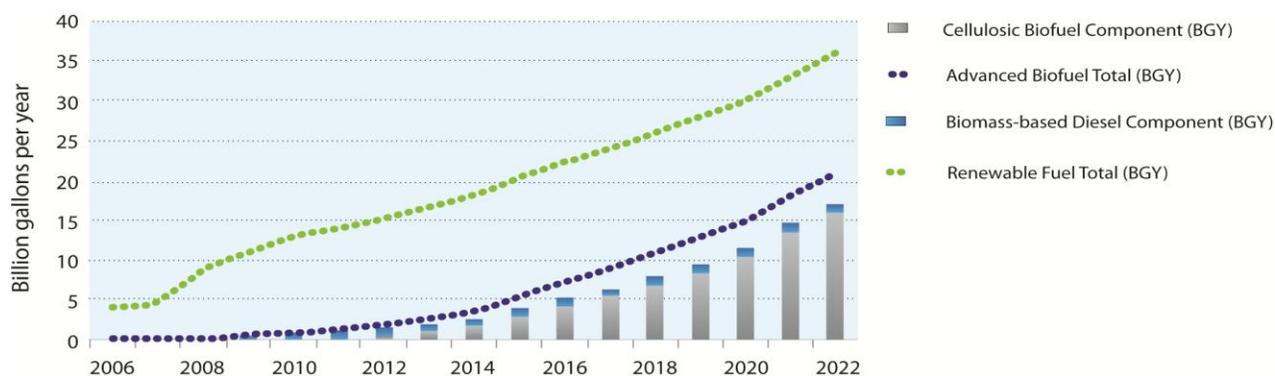
EISA legislation was signed into law on December 19, 2007. The law contains a number of provisions to increase energy efficiency and the availability and use of renewable energy. One key provision of EISA is the setting of a revised Renewable Fuels Standard (RFS). The revised RFS mandates the use of 36 billion gallons per year (BGY) of renewable fuels by 2022. The revised RFS has specific fuel allocations for 2022 that include use of:

- 16 BGY of cellulosic biofuels
- 14 BGY of advanced biofuels
- 1 BGY of biomass-based biodiesel
- 15 BGY of conventional biofuels (e.g., corn starch-based ethanol).

(See, 42 U.S.C. 7545(o)(2)) EISA legislation also established new definitions and criteria for both renewable fuels (e.g., greenhouse gas reduction thresholds) and the renewable biomass used to produce the fuels. Renewable biomass includes, generally:

- Crops from previously cleared non-forested land
- Trees from actively managed plantations on non-federal land
- Residues from non-federal forestland that is deemed not to be critically imperiled or rare
- Biomass from the immediate vicinity of buildings or public infrastructure at risk from wildfires
- Algae
- Separated yard or food waste.

(See, 42 U.S.C. 7545(o)(1)(I)) Excluded from the qualifying renewable biomass are resources from ecologically sensitive or protected lands, biomass from federal forestlands, biomass from newly cleared or cultivated land, and merchantable biomass from naturally regenerated forestlands.



Above write-up extracted from: Perlack, R. D., and B. J. Stokes (leads), *U.S. Billion-Ton Update: Biomass Supply for a Bioenergy and Bioproducts Industry*, ORNL/TM-2010/224, Oak Ridge National Laboratory, Oak Ridge, TN, 2011, p. 227.