

1 **“SEC. 9012. BIOCHAR RESEARCH, DEVELOPMENT, AND DEM-**
2 **ONSTRATION.**

3 “(a) *PURPOSE.*—*The purpose of this section is to sup-*
4 *port research, development, and demonstration of biochar*
5 *as a coproduct of bioenergy production, as a soil enhance-*
6 *ment practice, and as a carbon management strategy.*

7 “(b) *DEFINITION OF BIOCHAR.*—*In this section, the*
8 *term ‘biochar’ means charcoal or biomass-derived black car-*
9 *bon that is added to soil to improve soil fertility, nutrient*
10 *retention, and carbon content.*

11 “(c) *GRANTS.*—*The Secretary shall award competitive*
12 *grants to eligible entities to support biochar research, devel-*
13 *opment, and demonstration projects on multiple scales, in-*
14 *cluding laboratory biochar research and field trials, and*
15 *biochar systems on a single farm scale, local community*
16 *scale, and agricultural cooperative scale.*

17 “(d) *ELIGIBLE ENTITIES.*—*To be eligible to receive a*
18 *grant under this section, an entity shall be an eligible entity*
19 *described in section 9005(d).*

20 “(e) *AREAS OF BIOCHAR RESEARCH, DEVELOPMENT,*
21 *AND DEMONSTRATION.*—*In carrying out this section, the*
22 *Secretary shall solicit proposals for activities that*
23 *include—*

24 “(1) *the installation and use of biochar produc-*
25 *tion systems, including pyrolysis and*
26 *thermocombustion systems, and the integration of*

1 *biochar production with bioenergy and bioproducts*
2 *production;*

3 “(2) *the study of agronomic effects of biochar*
4 *usage in soils, including plant growth and yield ef-*
5 *fects for different application rates and soil types,*
6 *and implications for water and fertilizer needs;*

7 “(3) *biochar characterization, including analysis*
8 *of physical properties, chemical structure, product*
9 *consistency and quality, and the impacts of those*
10 *properties on the soil-conditioning effects of biochar*
11 *in different soil types;*

12 “(4) *the study of effects of the use of biochar on*
13 *the carbon content of soils, with an emphasis on the*
14 *potential for biochar applications to sequester carbon;*

15 “(5) *the study of effects of biochar on greenhouse*
16 *gas emissions relating to crop production, including*
17 *nitrous oxide and carbon dioxide emissions from*
18 *cropland;*

19 “(6) *the study of the integration of renewable en-*
20 *ergy and bioenergy production with biochar produc-*
21 *tion;*

22 “(7) *the study of the economics of biochar pro-*
23 *duction and use, including considerations of feedstock*
24 *competition, synergies of coproduction with bioenergy,*

1 *the value of soil enhancements, and the value of soil*
2 *carbon sequestration; and*

3 *“(8) such other topics as are identified by the*
4 *Secretary.*

5 *“(f) FUNDING.—There is authorized to be appropriated*
6 *to carry out this section \$3,000,000 for each of fiscal years*
7 *2008 through 2012.*

8 **“SEC. 9013. RENEWABLE WOODY BIOMASS FOR ENERGY.**

9 *“(a) IN GENERAL.—The Secretary, acting through the*
10 *Chief of the Forest Service (referred to in this section as*
11 *the ‘Secretary’), shall conduct a competitive research, tech-*
12 *nology development, and technology application program to*
13 *encourage the use of renewable woody biomass for energy.*

14 *“(b) ELIGIBLE ENTITIES.—Entities eligible to compete*
15 *under the program shall include—*

16 *“(1) the Forest Service (through Research and*
17 *Development);*

18 *“(2) other Federal agencies;*

19 *“(3) State and local governments;*

20 *“(4) federally recognized Indian tribes;*

21 *“(5) colleges and universities; and*

22 *“(6) private entities.*

23 *“(c) PRIORITY FOR PROJECT SELECTION.—The Sec-*
24 *retary shall give priority under the program to projects*
25 *that—*