

**Amendment offered by Mr. Riley of New York**

**Amendment description**

This amendment directs the Secretary of Agriculture to make available information to educate farmers on the cost savings, energy savings, and water conservation that can be achieved through efficient pumping systems.

**AMENDMENT**

**OFFERED BY MR. RILEY OF NEW YORK**

At the end of title IX, add the following:

1 **SEC. \_\_\_\_ . LEVERAGING EFFICIENCY AWARENESS FOR**  
2 **PUMPING SYSTEMS.**

3 (a) FINDINGS.—Congress finds the following:

4 (1) There are over 600,000 pumping systems  
5 used for irrigation on agricultural land in the United  
6 States, many of which still rely on fossil fuels.

7 (2) Improving the efficiency of agricultural irri-  
8 gation pumping systems can save up to 22 billion  
9 kilowatt hours of energy per year and eliminate 8.3  
10 million metric tons of carbon emissions annually.

11 (3) Energy savings from electrifying agricul-  
12 tural irrigation pumping systems can save farmers  
13 and ranchers more than \$1.8 billion annually in en-  
14 ergy costs.

15 (4) Pumping systems play a central role in the  
16 watering of livestock and the management of animal  
17 waste in every State.

18 (5) Pumping systems are a critical component  
19 of the Nation's \$2,300,000,000 aquaculture indus-  
20 try.

1           (6) Improving the efficiency of pumping sys-  
2           tems used in raising livestock and fish can signifi-  
3           cantly reduce energy use, save producers millions of  
4           dollars annually, and provide meaningful reductions  
5           in carbon emissions.

6           (7) Agricultural irrigation pumping systems uti-  
7           lizing plastic piping can provide significant drought  
8           relief benefits, dramatically reducing water losses  
9           from evaporation and seepage; agriculture uses 37  
10          percent of the Nation's surface and ground water,  
11          30 percent of which is lost to seepage and evapo-  
12          ration.

13          (8) Reducing the friction in piping used for ag-  
14          ricultural irrigation and livestock watering can pro-  
15          vide meaningful energy and cost savings; there are  
16          potentially 2,500 kWh of energy savings for every 10  
17          miles of plastic piping utilized in delivering water for  
18          crops and livestock.

19          (9) Solar pumping systems can play an impor-  
20          tant role in protecting riparian habitat and improv-  
21          ing water quality in streams, rivers, lakes, and estu-  
22          aries through providing alternative watering options  
23          for livestock.

24          (b) INFORMATION ON ENERGY-EFFICIENT PUMPING  
25          SYSTEMS.—

1           (1) IN GENERAL.—Not later than 180 days  
2 after the date of enactment of this section, the Sec-  
3 retary, in consultation with pumping system experts,  
4 in order to educate farmers on the benefits of en-  
5 ergy-efficient pumping systems, shall develop and  
6 make publicly available on the website of the De-  
7 partment easily accessible information on cost sav-  
8 ings, energy savings, water conservation, and carbon  
9 emissions reductions that can be realized through  
10 the use of energy-efficient pumping systems.

11           (2) CONTENTS.—In carrying out paragraph (1),  
12 the Secretary shall include information on—

13                   (A) pumps, pipes, motors, drives, and con-  
14 trols that can provide energy savings and cost  
15 savings, conserve water, and reduce carbon  
16 emissions; and

17                   (B) Department programs that provide  
18 farmers resources for acquiring energy-efficient  
19 pumping systems and drought management in-  
20 frastructure, including the environmental qual-  
21 ity incentives program, the Rural Energy for  
22 America Program, and the conservation stew-  
23 ardship program.

24           (c) ENERGY EFFICIENCY PRE-ASSESSMENT TOOL.—

1           (1) IN GENERAL.—Not later than 180 days  
2 after the date of enactment of this section, the Sec-  
3 retary, in consultation with pumping system experts,  
4 in order to raise awareness of the benefits of energy-  
5 efficient pumping systems and increase participation  
6 in Department programs that promote energy effi-  
7 ciency, shall develop and make publicly available on  
8 the website of the Department a user-friendly tool  
9 to—

10                   (A) assist farmers in making a preliminary  
11 assessment of the energy efficiency of existing  
12 pumping systems; and

13                   (B) provide an estimate of potential energy  
14 savings, cost savings, and carbon emissions re-  
15 ductions that may be realized through pumping  
16 system improvements.

17           (2) REQUIREMENTS.—

18                   (A) EASE OF USE.—The Secretary shall  
19 ensure that the tool made available under para-  
20 graph (1) provides a user with projected energy  
21 savings, projected cost savings, and projected  
22 carbon emissions reductions through the input  
23 by the user of the following data relating to an  
24 existing pumping system:

25                           (i) Pump type.

1 (ii) Flow rating and actual flow.

2 (iii) Pressure rating and actual pres-  
3 sure.

4 (iv) Speed rating and actual speed.

5 (B) CONSIDERATIONS.—The Secretary  
6 shall ensure that the tool made available under  
7 paragraph (1)—

8 (i) in assessing the energy efficiency  
9 of a pumping system, takes into consider-  
10 ation pumps, pipes, motors, drives, and  
11 controls associated with the pumping sys-  
12 tem; and

13 (ii) in projecting the energy savings,  
14 cost savings, and carbon emissions reduc-  
15 tions that may be realized through pump-  
16 ing system improvements, takes into con-  
17 sideration the cost of electricity and the  
18 profile of the existing pumping system.

19 (d) ENERGY AUDITOR EDUCATION.—

20 (1) IN GENERAL.—Not later than 180 days  
21 after the date of enactment of this section, the Sec-  
22 retary, in consultation with pumping system experts,  
23 in order to increase the effectiveness of Department  
24 of Agriculture energy efficiency programs, shall es-  
25 tablish a process to educate persons performing en-

1       ergy efficiency audits for the Department of Agri-  
2       culture on energy use and energy efficiency in pump-  
3       ing systems.

4           (2) IMPLEMENTATION.—In carrying out para-  
5       graph (1), the Secretary shall consider the use of ex-  
6       isting education and training programs focused on  
7       energy use and energy efficiency in pumping sys-  
8       tems.

9       (e) CONSERVATION STEWARDSHIP PROGRAM ACTIVI-  
10      TIES.—Section 1240I(2)(B)(i) of the Food Security Act  
11      of 1985 (16 U.S.C. 3839aa–21(2)(B)(i)) is amended by  
12      inserting “and energy-efficient pumping systems” before  
13      “, as determined”.

14       (f) DEFINITION OF PUMPING SYSTEM.—In this sec-  
15      tion, the term “pumping system” means any pumps,  
16      pipes, motors, drives, and controls used to move water and  
17      other fluids on farms, ranches, and aquaculture oper-  
18      ations.

