

Testimony of
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Senate Committee on Agriculture, Nutrition & Forestry
Hearing on
Agriculture and Rural America's Role in Enhancing National Energy Security

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Good morning, Chairman Harkin, Ranking Member Chambliss, and Members of the Committee. Thank you for the opportunity to testify today on behalf of the nearly four hundred organizations that comprise the 25x'25 Renewable Energy Alliance.

My name is Read Smith, and I am one of the two Co-Chairs of the 25x'25 Alliance. Along with my wife and son, I manage our families' farming interests, consisting of nearly 10,000 acres in Whitman County, Washington. Our principal crops are soft white and hard red winter wheat, hard red spring wheat, barley, soft and hard white spring wheat, along with canola, mustard, safflower, millet, alfalfa hay and other minor crops. We also manage a cow/calf operation.

Mr. Chairman, on behalf of the 25x'25 Alliance, I want to begin by welcoming you back to the chairmanship and thanking you for your long-time leadership on energy issues, including 25x'25. Senator Chambliss, we also want to thank you for the leadership you have shown over time, and your support of our efforts. We look forward to working with both of you, as we have in the past, on 25x'25 and as you craft the Farm Bill.

Today's hearing on energy solutions from agriculture and forestry makes a dramatic statement about the importance this Committee places on accelerating the development of renewable energy from our nation's farms, forests and ranches. It is very much appreciated by those of us who make our living off the land.

The Challenge and Need for New Energy Solutions

As you well know, our nation and the world are searching for new energy solutions. Oil reserves are limited and are located in politically volatile parts of the world; population growth and economic growth, especially in India and China, will place more demands on limited energy supplies. At the same time, our nation is becoming increasingly dependent on foreign oil, directly compromising national security. The cost of oil has skyrocketed over the past three years, and the price of natural gas has fluctuated wildly, creating major economic challenges for the nation and for agriculture. Beyond these concerns, the burning of fossil fuels is harming air quality and resulting in the release of greenhouse gas emissions into the atmosphere.

Americans are confronting one of their biggest challenges in decades. We cannot continue on the path of what some have called "yesterday forever." As energy demands increase, both here

and abroad, we will need to come up with additional energy supplies - ones that are sustainable. Instead of importing oil from the Middle East, we can produce more energy here at home, using America's agriculture and forestry lands for fuel as well as food, feed and fiber.

Origins of 25x'25

With these challenges - and opportunities - as a backdrop, a group of highly respected agriculture leaders came together two and one-half years ago at the invitation of the Energy Future Coalition to explore agriculture and forestry's role in helping the nation meet its energy needs going forward. We named ourselves the Ag Energy Work Group and focused on the economic, national security and environmental benefits of renewable forms of energy produced by America's farmers, ranchers and forestry land owners. During the summer and fall of 2004, we explored three key questions:

- 1) What role can the farm and forestry sectors play in producing energy?
- 2) How big a contribution can we make?
- 3) What has to happen for our vision to come to life - in other words, what will it take?

In searching for the answers to these questions, we talked to hundreds of producers and interviewed dozens of national agricultural organizations. The responses that we received led us to conclude that there was not just an emerging opportunity to participate in renewable energy production, but an historic opportunity to enhance our national security and redefine the core functions of agriculture.

The 25x'25 Vision

We became convinced that America's farms, ranches and forests could become suppliers for a new generation of clean, alternative fuels and energy feedstocks. At the same time, we would contribute to a cleaner environment and enhanced rural economic development. As a result, we adopted a simple, but bold goal: 25x'25. By the year 2025, America's farms, ranches and forests will provide 25 percent of the total energy consumed in the United States from renewable sources, while continuing to produce safe, abundant and affordable supplies of food, feed, and fiber. This goal will be met by producing bio-based fuels for transportation, harnessing wind energy, capturing and converting sunlight into energy, converting agricultural wastes and by-products into energy sources, and growing biomass for energy production.

Our vision is a food, feed, fiber and fuel vision. With emerging technologies and appropriate policies, agriculture can produce multiple commodities. In 2005, we tested this vision with leaders representing all aspects of production agriculture and forestry. Their response was overwhelmingly positive. By the end of the year, we had secured endorsements from nearly 80 national and regional entities. In March 2006, we held a national summit here in Washington, where we formally announced our renewable energy vision and goal and launched a drive to recruit environmental, conservation, business, labor, and other interests to join with us in endorsing and promoting this vision as a national goal.

I am pleased to report that, as of today, nearly 400 organizations have committed to the goal of 25x'25. They are joined by 22 current and former governors, 4 state legislatures, 30 current and former Senators, including many Members of this Committee, and 94 current and former

Representatives - all of whom have signed on in bipartisan support of a 25x'25 energy future. We represent a diverse collection of endorsing partners, ranging from the American Farm Bureau Federation and the National Farmers Union to the Natural Resources Defense Council and Environmental Defense. The 25x'25 vision has been endorsed by the "Big 3" U.S. automobile manufacturers, Deere & Company, the Theodore Roosevelt Conservation Partnership, and the National Wildlife Federation. In addition, most of the major commodity organizations and most of the major renewable energy trade associations, such as the American Wind Energy Association, have endorsed 25x'25. We also include among our ranks the National Rural Electric Cooperative Association, the Renewable Fuels Association, the National Biodiesel Board and the Biotechnology Industry Organization. These organizations, along with hundreds of others, agreed to join the 25x'25 Alliance because they believe in the vision and want to work collaboratively to bring the goal of 25x'25 to life.

Benefits of a 25x'25 Energy Future

25x'25 is good not only for national security and the economy - it is also good for agriculture, forestry and the environment. A 25x'25 energy future will generate increased farm income, stimulate rural development, and help improve air, water and soil quality. It will also result in improvements in wildlife habitat and conservation on cropland, range and pasturelands.

Last year, in an effort to quantify the economic benefits that 25x'25 would have on the agricultural sector and the economy, we commissioned a major analysis conducted by a team of researchers from the Department of Agricultural Economics at the University of Tennessee's Institute of Agriculture. The researchers were asked to determine the ability of America's farms, forest and ranches to provide 25 percent of U.S. total energy needs in 2025, and to assess the economic impacts of the 25x'25 goal on the agricultural sector and the overall economy.

The analysis revealed the following findings:

- ? America's farms, forests and ranches can play a significant role in meeting the country's renewable energy needs.
- ? The 25x'25 goal is achievable. To meet the 25x'25 goal, which amounts to 29.42 quads of energy, an additional 15.45 quads would need to come from agricultural and forestry lands.
- ? The 25x'25 goal can be met without compromising the ability of the agricultural sector to reliably produce food, feed and fiber at reasonable prices.
- ? Reaching the goal would have extremely favorable impacts on rural America and the nation as a whole. Including multiplier effects throughout the economy, the projected annual, cumulative impacts on the nation would be in excess of \$700 billion in economic activity and 5.1 million jobs in 2025, with most of that occurring in rural areas.
- ? By reaching 25x'25, net farm income would increase by \$37 billion compared with USDA baseline projections, as the market rewards growers for producing alternative energy and enhancing our national security.
- ? Reaching the goal also would have significant positive price impacts on crops. In the year 2025, when compared with extended USDA baseline projections, national average per-bushel crop prices are projected to be \$0.71 higher for corn, \$0.48 higher for wheat, and \$2.04 higher for soybeans.
- ? With higher market prices, an estimated cumulative savings in government payments of \$15

billion could occur. This does not include potential savings in fixed/direct or Conservation Reserve Program (CRP) payments.

? In the near term, corn acres are projected to increase, but as cellulosic ethanol becomes commercially viable after 2012, the analysis predicts major increases in acreage for a dedicated energy crop like switchgrass, while corn acres will decline slightly.

? Higher feed crop prices do not translate into a one-to-one increase in feed expenses for the livestock industry. Increases in ethanol and biodiesel production result in more distillers grains (DGs) and soybean meal, which partially compensate for increased corn prices. Moreover, the integrated nature of the industry allows for the adjustment of animal inventories as a way to adjust to the environment and increase net returns. In addition, the production of energy from manure and tallow could provide additional value for the industry. The transition to cellulosic ethanol may yield even additional sources of feed alternatives for animal agriculture.

? Contributions from America's fields, farms and forests could result in the production of 86 billion gallons of ethanol, which has the potential to decrease gasoline consumption by 59 billion gallons in 2025. America's agriculture and forest lands also could produce substantially more energy for electric power from biomass and wind sources. These renewable energy sources could significantly decrease the nation's reliance on fossil fuels and foreign oil, and thereby enhance the national security of all Americans.

Forest residues, mill wastes and small-diameter trees from thinning forests to reduce the risk of forest fires comprise the woody biomass feedstocks evaluated in the study. The nation has over 400 million acres of privately owned forest land, with over 40 million of these acres in plantation forests. This forest resource could provide additional woody feedstocks. A follow-up study focusing on these specific feedstocks is planned.

We recognize that our partners in animal agriculture are experiencing significant price increases in many of their primary feedstocks. Even as demand for ethanol increases, the corn yield curve is increasing at an accelerated rate, due to advances in biotechnology and improved cropping practices. There are strong indications that as corn demand continues to increase, because of ethanol production, some acreage may be shifted in the short term to corn and away from other crops. Accelerated research and development is needed to help address the concerns of the livestock sector, particularly relative to the use of distiller grains and other challenges.

A key finding from the University of Tennessee study is that continued improvements in traditional crop yields enable the production of enough biomass to meet the 25x'25 goal using cropland that is in production, without including CRP lands - at prices that would imply a cost of ethanol of \$1.60 per gallon and of \$2.74 per gallon of biodiesel.

Total energy feedstock quantities, changes in land use for selected simulated years, and changes in net farm income and government payments are displayed in the following charts:

Total Energy Feedstock Quantities Produced

Changes in Land Use

Changes in Net Farm Income and Government Payments

Public Support for 25x'25

Last year, Public Opinion Strategies undertook a survey of 1,000 registered voters to test support for renewables and the 25x'25 goal. Among the findings were:

? There is nearly unanimous support for a national goal of having 25 percent of our domestic energy needs met by renewable resources by the year 2025.

? Ninety-eight percent of voters see this goal as important for the country, and three out of four (74 percent) voters feel that it is "very important." Ninety percent of voters believe this goal is achievable.

? Similar majorities support government action to encourage greater use of renewable energy.

? Nearly all voters (98 percent) say the costs, such as the costs of research and development and of building new renewable energy production facilities, would be worthwhile to move us toward the 25x'25 goal.

Path to 25x'25

The 25x'25 partners are now working to construct a road map to achieve 25x'25. Over the past six months, representatives from the endorsing entities have been meeting jointly and in working groups to develop a detailed 25x'25 Implementation Plan which will include policy recommendations to achieve this goal. The 25x'25 goal and Implementation Plan stand on a foundation of five key principles.

? Partnership - No one region or player can, by itself, achieve the 25x'25 goal. It must be built on partnerships among many diverse stakeholders.

? Commitment - Decision makers must maintain a commitment to renewable energy over a long period of time to create the right policy environment and market circumstances for its success.

? Sustainability - To be a long-term solution for America, renewable energy production must conserve, enhance, and protect all natural resources and be environmentally sound, economically viable and socially acceptable.

? Efficiency - An efficient energy system will make it easier to achieve the 25x'25 goal and strengthen our economy, security, and environment. Significant energy efficiency improvements are possible and necessary to reduce total energy demand and help reach the 25x'25 goal.

? Opportunity - The opportunities for renewable energy are ubiquitous - every region of the United States has the potential to produce and benefit from renewable energy. Seizing those opportunities will enhance:

- o Economic growth by expanding rural development, creating new jobs, and reducing consumer energy costs;

- o National security by reducing dependence on oil, and

- o Environmental protection by expanding wildlife habitat, and improving soil, water and air quality.

Taking the First Step

The first step to achieving a 25x'25 energy future is to establish 25x'25 as a national goal. Chairman Harkin, last year, you, along with Senator Grassley, Senator Salazar, Senator Lugar, and 12 other original sponsors, introduced the 25x'25 vision as a Concurrent Resolution, S. Con. Res. 97.

We look forward to your continued leadership and support, and that of your colleagues, to re-introduce this Resolution in the coming days. Following that, we urge you and the Ranking Member, and the Members of this Committee, to promptly pass the Resolution, so the Resolution can be brought before the entire Senate for swift passage. We are pushing for the same to occur in the House. By establishing 25x'25 as a national goal, Congress will send a clear and powerful message that clean, renewable energy will define America's energy future.

American agriculture is uniquely positioned to play a major role in improving energy and national security, strengthening the national and rural economies, and improving the environment. In the coming weeks, as you once again take up Farm Bill legislation, we urge you to ensure that the Energy Title is structured and funded commensurate with the challenge and opportunity facing the nation and our farmers, ranchers and forest land managers. In February we will be releasing the 25x'25 Implementation Plan, and we look forward to sharing these recommendations with you and the Members of this Committee.

Thank you again for the opportunity to appear before you today. We hope you will look to us as a resource as you move forward with the Farm Bill and look forward to continuing to work together. I would be pleased to respond to any questions.